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Aurora Manufacturing Ltd

Environmental Management System Manual

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Management System Representative (MSR):	Julie Bower

WHEN PRINTED THIS DOCUMENT IS UNCONTROLLED

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Screen	Habitat Screening Report & Maps	16/04/2021
'H1TOOL'	Air Emissions Assessment	V1, 11/02/2021
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ERA	Site-specific Environmental Risk Assessment	V1, 31/03/2021
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Form 1	Daily Diary/ Site Inspection Form	V1, 15/03/2021

SECTION 1 – GENERAL

This management system relates to activities taking place at the site below. This is in support of a bespoke permit application for the receipt and processing of post-consumer polymers by compound extrusion by Aurora Manufacturing Ltd (herein referred to as 'the Company'). The permitted activities are set out in the permit. The site's U8, U9 and T4 waste exemptions will therefore not be renewed at expiration. The EMS covers all activities within the permitted area.

The Company is a plastics recycling business. Established in 2003, the business provides high quality recycled polymers throughout the UK. The Company handle recycled and prime polymers concentrating largely on recycling solutions and the re-extrusion of waste plastics. The Company employees circa 20 FTE and operates under SIC: 38320 (recovery of sorted materials).

Site Infrastructure
Key site features are set out in **Map 2: Site Infrastructure Plan**. A separate plan; **Map 3 Site Waste Plan** identifies waste piles for fire prevention purposes. The site is not within 200 metres of a European Site, SSSI or AQMA. A separate **FPP Sensitive Receptor Review** has also been conducted.

The waste activity operates from **Unit 4 Bridgewater Business Park, West Bridgewater Street, Leigh, Lancashire, WN7 4HB**. Easting/ Northing: 365846/399535. The site is located just south of Leigh Town Centre in the south eastern part of Bridgewater Business Park and is approximately 1.58ha in size (15,800m^2). The site is bounded to the west, north and east by continuation of the business park and to the south by house nos. 47 to 85 Rugby Road (circa 20 metres away from the main building to nearing gardens), with Rugby Road beyond.

In the eastern part of the site, a 2-storey office block with an attached disused workshop, in the centre a polymer recycling plant, in the north western part an electricity sub-station (being removed in 2020 with power restored via a near-by high voltage supply off the permitted area). The southern boundary is delineated by a concrete panel fence and barbed wire while the other boundaries are unmarked.

A **Topographical Survey** indicates that the site is relatively flat, particularly on the western and southern boundaries (circa 24m OD, with a 10mm fall towards the building). There is a fall at the eastern boundary (dropping to 23.15m OD), but this part of the site is not part of the permitted area. It has been re-surfaced and re-drained and sub-let to another operator.

A separate **Drainage Survey** has also been produced, with this indicating that surface and foul drains combine into the public sewer. Simplified topography and drainage features have been added to **Map 2: Site Infrastructure Plan** as applicable.

A **Noise Survey** from 2018 is also applicable because it considers the changes being made to the site in 2020. The in-door nature of noisy activities and day-time activities for noisy activities as well as noise attenuation measures shows that the current operations will result in reduced noise emissions in most areas.

Site History
The site was occupied by the Company in 2003 having previously been used (up to circa the year 2000) by British Insulated Callender's Cables (renamed Balfour Beatty) as a cable manufacturer and construction company. The industrial estate itself dates back to the early 1900s. The site is currently on a 3 year rolling 'lease to purchase' agreement with the landlord.

A **Ground Investigation Report** has been produced and provides part of the information used in the **Site Condition Report.** This logs ground conditions as well as allowing the logging of future changes and in preparation for any future permit surrender.

Surfaces are constructed of made ground to circa 0.2 metres depth, underlain by interlayered granular and cohesive made ground with no discernible pattern between circa 0.3 – 2.0 metres. Cohesive material included:

- Gravelly silty clays with low cobble sized fragments of siltstone; gravel sized fragments comprised of mudstone and siltstone; and
- Gravelly slightly sandy silty clays with low cobble sized fragments; gravel sized fragments comprised of stone, brick, clinker and slag.

The above was underlain by low becoming very high strength cohesive glacial drift deposits to at least 3.45 metres.

Knowledge of the site gleaned from Ground Investigation Report indicates that the site is 'brownfield' and locally acidic with potentially mobile groundwater. Contamination analysis determined no elevated levels of determinants analysed when compared with guideline values for a standard land use of commercial and industrial.

An asbestos screen was also undertaken on seven soil samples and no asbestos was detected in six of them. However, in the soil sample from 0.2 to 0.4 metres depth in M8, asbestos (chrysotile) was detected.

With the exception of the chrysotile in sample 8, there are no contaminants requiring remediation and/or precautions to be taken. Localised removal of the asbestos at M8 was recommended.

Ground gas monitoring did not detect any gas flows.

Security
The site benefits from 24/7 site security based to the West of the site via West Bridgewater Street. An alternative entrance is available (access for Regency Glass only) on the East of the estate, via Henry Street. The southern boundary benefits from a 2 metre concrete retaining wall. This provides some protection from the rear gardens of existing dwellings located on Rugby Road.

The site benefits from external lighting and extensive CCTV for safety purposes, as identified on the **Site Plan**. Parking is provided for staff and visitors, as identified on the Site Plan.

Access
Access to the site is via the security lodge on West Bridgewater Street (north west of the site).

Hours of operation
The site is open 24/5 (Mon-Fri), except for public holidays. Extrusion can occur 24 hrs per day, Mon-Fri. Granulation occurs in an adjacent building, under an exemption by a third party; typically taking place during standard business working hours (8-5, Mon-Fri).

Management
The minimum technical competence is anticipated to be 20% of operating hours, which results in 24 hrs being required on site per week (based on a maximum of a 120 hr working week).

The Company intends to retain 2 competent persons, to ensure there is at least one competent person on site at any one time. The appropriate CIWM/ WAMITAB EPOC has been completed, with the full WAMITAB qualification to be completed within 12 months of the permit being issued. The Company is aware that 'continued competence' must be maintained every 2 years and/or 'cover' by a competence third party will be arranged.

Support will also be requested from a third party if the nominated competent person was not going to be on site for more than the minimum hours averaged over any 4-week period.

The Company understands that site management attendance hours may change following any change made by the EA OPRA assessment.

SECTION 2 – SITE OPERATIONS

General

The site receives waste plastic to extrude into polymers for sale. Specified permitted activities are set out in the permit and include:

- R13: Storage of wastes pending any of the operations numbered R1 to R12
- R3: Recycling/ reclamation of organic substances which are not used as solvents

Recycling/ reclamation includes treatment consisting of manual sorting, separation, screening, blending of polymers and heat treatment (extrusion).

Historically the site has operated under RPS 112 and U9 waste exemptions. This allows heat to be applied to up to 100t of waste plastic per week without the need for an environmental permit for a waste operation as well as being regarded as holding an environmental permit when applying for accreditation as a reprocessor of packaging waste under the Producer Responsibility Obligations (Packaging Waste) Regulations 2007 (as amended).

Aurora is an accredited reprocessor (ER202004444) and exporter (EX202015142) of packaging waste and registered for U9 exemption, WEX144302.

Directly associated activities include:

- Acceptance of storage of post-consumer (waste), Wrap protocol compliant material and virgin polymers.
- Compound extrusion of the above materials/ waste.
- Storage of polymer products.
- Treatment and extraction of extrusion fume.

Nb. Accepted waste/ material can be in it's raw (requiring grinding) or semi-raw state.

Unacceptable waste will be quarantined, prior to arranging onward transport to an appropriate third party permitted facility.

A daily site inspection is conducted to check compliance and a site diary retained to record relevant activities, incidents or actions.

In order to maximise production, the site requires circa 2 weeks of semi-finished polymer (~600 tonnes) on site. This equates to 968 cu.m of storage.

There are 3 **extrusion** plant on site. Only 2 of the extruders can run at any one time.

Line 2
Synthetic polymer – Nylon
500kg/hr
Coperion twin screw double vented, with claw dry vacuum pump with 2 stage-filtration (Busch Plastex)
Stack 1 - Mid-point on valley of east facing roof

Line 3
Polyolefin polymer
1000kg/hr
Coperion twin screw double vented, with claw dry vacuum pump with 2 stage-filtration (Busch Plastex)
Stack 1 - Mid-point on valley of east facing roof

Line 4
Polyolefin polymer
2000kg/hr
Erema single screw, wet system recycled water (200 litres of clean)
Stack 2 - Mid-point on valley of west facing roof

Extrusion speeds vary depending on the material and extruder. Extruded pellets are 3mm in diameter. There is a maximum extrusion capacity of circa 3,000 kg per hour (combined).

Granulated plastic (20-30mm) is sourced from an adjacent business and/or other suppliers and stored prior to extrusion.

Waste reception

Extrusion speeds vary depending on the material and extruder. Extruded pellets are 3mm in diameter. There is a maximum extrusion capacity of circa 3,000 kg per hour (combined).

Granulated plastic (20-30mm) is sourced from an adjacent business and/or other suppliers and stored prior to extrusion.

Waste **MUST ONLY** be delivered to site if associated with a formal purchase order from an approved supplier. Delivered waste is visually checked on receipt to identify any unauthorised waste, with the load being rejected if necessary. A **Waste Acceptance Procedure (P4)** is documented.

All buildings and storage areas benefit from concreting. Drainage arrangements consider the site topography and ensure that run-off drains to foul sewer.

Significant surface gradients are identified on **Map 2: Site Infrastructure Plan**.

Once waste is confirmed as acceptable, a waste transfer note is produced. The specified requirements in the Waste Regulations are included.

If the method by which waste is received and/or the types of waste received change, then the EMS will be updated as appropriate.

Waste treatment

Treatment of waste will be as specified in the permit.

The following key permit conditions are complied with:

- The storage and treatment of waste is carried out inside a building.
- Treatment consists of compound extrusion via the application of heat in order to convert waste packaging to a pelletised product.

Emissions testing (see **Line 3 and Line 4 Reports**) has been conducted, along with a **Site-specific Environmental Risk Assessment**.

The total quantity of waste processed into extruded pellets on site is circa 15,000-20,000 tonnes per annum; the site has requested to be permitted to 29,999 tonnes per annum to allow for growth.

Burning of waste is not permitted on site.

If the method by which waste is treated changes, then the EMS will be updated as appropriate.

Waste storage

The following key permit conditions are complied with:

- All waste is stored and treated on an impermeable surface with sealed drainage.
- Waste is only stored within the land edged green on the site plan issued by the Environment Agency.

Maximum storage volumes have been imposed as part of the site's **Fire Prevention Plan** and as per **Map 3 Site Waste Plan**.

Liquid waste and/or fuels are not stored on site. Spill kits are kept on site as per the **Spill Management Procedure (P2)**.

If the method by which waste is stored changes, then the EMS will be updated as appropriate.

Waste dispatch

The dispatch of waste is rare (extruded pellets are non-waste), however, any rejected waste is sent to third-party permitted facilities for further processing. Checks are made via the EA public register to ensure that anyone collecting waste from site is a registered waste carrier. Waste transfer notes are completed as part of the dispatch process.

Waste analysis will be conducted if requested by the third party receiving the waste. Analysis is conducted by the third party and/or an independent laboratory.

Any hazardous waste, such as quarantined waste, waste oils are sent to third party permitted facilities for further processing. Hazardous waste consignment notes are

completed as part of the dispatch process and the corresponding consignee return (‘part E’) is retained to ensure safe disposal/ recovery of the waste.

If the method by which waste is dispatched changes, then the EMS will be updated as appropriate.

SECTION 3 – MAINTENANCE

Start-up/ shut-down/ maintenance activities

It is the Company policy to ensure all equipment is serviced and maintained to ensure it meets applicable legislation and also to ensure continuity of waste treatment operations.

The following maintenance arrangements are in place for equipment on site:

Equipment	Preventive maintenance	Statutory maintenance
Extruders	Daily pre-use check and weekly clean	On-site servicing/ maintenance
FLTs and chargers	Daily pre-use check	Third party statutory testing and servicing
Compressor	Daily pre-use check	Third party statutory testing and servicing
Cooling plant	Daily pre-use check	Third party statutory testing and servicing
Drains/ gullies	Daily check	-
Gates, fencing	Daily check	-
Buildings	Daily check	-
Surface conditions	Daily check	-
Electrical infrastructure (HV and LV)	Daily check	3-yearly fixed wiring inspection
Various hand-held tools	Daily pre-use check	Annual portable appliance test (for electrical appliances)
Lighting	Daily check	-
CCTV	Daily check	-
Smoke detection	Daily check	6 monthly inspection
Fire alarms	Daily check	6 monthly inspection
Fire extinguishers	Daily check	12 monthly inspection

A **daily inspection** is conducted to check compliance and the site is tidied at the end of every working day.

The need for any additional equipment to reduce environmental risk will be kept under review.

SECTION 4 – CONTINGENCIES/ ACCIDENT PREVENTION & MANAGEMENT

Contingency Plans

Consideration has been given to how the site minimises the impact on the environment follow any:

- breakdowns
- enforced shutdowns
- any other changes in normal operations, for example due to flooding or other extreme weather

Further information is provided in the **Accident Prevention and Management Plan (P1)**.

The Company recognise the potential impacts from climate change. In particular climate projections for the UK suggest that we can expect the following:

- higher average temperatures – particularly in summer and winter
- more heat waves and hot days
- rising sea levels
- changes in rainfall patterns and intensity
- more storms

Checks on the Environment Agency flood risk website, confirm that the site is not at risk of flooding and extreme weather conditions that are likely to result in the site not being operational, are at this stage rare.

Consideration has been made for surface run off, via re-surfacing and re-drainage improvements.

Information from the Met Office on climate change projection (https://www.metoffice.gov.uk/research/collaboration/ukcp) will be monitored periodically.

Accident Prevention and Management Plan

A separate **Accident Prevention and Management Plan (P1)** has been produced.

SECTION 5 – COMPLAINTS

Complaints Procedure

It is Company policy to acknowledge all complaints and to respond within 48hrs. In particular, any complaints received in relation to activities covered by the permit (i.e. complaints from neighbours about noise, odour or dust from site) will be dealt with as a matter of urgency. Measures to avoid, reduce environmental risk are listed in the Accident Prevention and Management Plan.

Circumstances will always dictate the exact procedure, but investigations will generally result in:

- Acknowledgement with the individual concerned
- Investigation into the cause
- Implementation of any action to contain the problem
- Implementation of any action to prevent it re-occurring

Records will be retained in the site diary to include the date/ time, nature, cause, along with any response.

If required by the permit, the complaint will be reported to the Environment Agency – see Section 9.

SECTION 6 – MANAGING STAFF COMPETENCE AND TRAINING

Managing Staff Competence and Training Records

It is Company policy to ensure there are enough staff and resources to make sure the site is run effectively in order to comply with our period.

Site management includes a technically competent person (TCM). Third party support is available from Chris Wilson Consulting Ltd, as required.

The technically competent person on site is: Alex Cook. Responsibilities include:

- Overall compliance with permit conditions and other environmental legislation.
- Ensuring policies and procedures are implemented and enforced.
- Ensuring staff are trained and competent and that re-assessment/ training is completed.
- Completing daily site inspections.
- Reacting to issues reported from staff and/or the Environment Agency.
- Completing and managing paperwork, including that associated with waste, staff and business administration.
- Ensuring there are enough resources to run the site effectively, this includes staffing, equipment and consumables.
- Conducting management meetings and completing associated actions.
- Liaising with regulators, including the Environment Agency.
- Day to day division of labour and management of staff, including ensuring that staff follow the site rules.
- Ensuring all equipment is used appropriately.
- Ensuring equipment is maintenance.
- Over-seeing the treatment of waste.
- Operating key equipment used on site.
- Organising transport to and from site.
- Management of visitors and contractors.

Staff are responsible for:

- Acting in accordance with Company procedures and site rules.
- Booking-in, moving sorting and storing, waste.
- Reporting issues to management.

Making sure people understand what we do

The key requirements of the EMS that are relevant to staff, are communicated via Toolbox Talks and site meetings and checked as part of the daily site inspections.

A copy of the EMS will be retained on site, in at least electronic format.

After consideration, it was not felt necessary to provide any specific information to our neighbours or other interested parties. Neighbours may be contacted as part of the

Accident Prevention and Management Plan (P1). A sign will be positioned at the front of the site should any interested party wish to contact us or the Environment Agency about any activities on site.

SECTION 7 – RECORD KEEPING

Keeping Records

The Company acknowledges that the following records must be retained:

- Environmental permits covering activities on site and associated Environmental Risk Assessment.
- Emission testing results.
- This Environmental Management System and any associated records, including Site Plans.
- Correspondence from regulatory authorities, including emails, audit/ inspection reports and action taken.
- Compliance documentation such as waste transfer notes, consignment notes, hazardous waste returns, EA returns, logs of waste movement (confirming the type, quantity, origin, producer, date).
- Any operating procedures, in addition to those stored in this EMS.
- Staff competence and training records, including inductions and TBTs signed (for example qualifications, courses attended).
- Site inspection/ site diary records.
- Complaints investigated and any relevant corrective action

There are no historic site maps or known instances of pollution, however, we will keep records of any instances likely to result in pollution and our response to these.

All records will be legible, be made available if requested, as soon as possible.

When amended, version control will ensure that previous versions are retained.

All records will be retained, unless otherwise agreed by the Environment Agency, for at least 6 years from the date the record was made, or in the case of off-site environmental effects and/or matters which affect the condition of land and groundwater until the permit is surrendered.

SECTION 8 – REVIEWING THE EMS

Checks will be made on an ongoing basis to ensure the site is complying with the permit, procedures and management system. Record of the results of these checks will be retained, along with any corrective action.

The EMS will be updated:

- When changes are made to the site, operations or equipment that affect the activities covered by your permit.
- If an application is made to vary the permit.
- Following any accident, complaint or breach of the permit.
- If we encounter a new environmental problem or issue, and have implemented new control measures to control it.

We will keep a record of changes to the EMS, particularly major changes such as:

- A change to the maximum amount of waste stored on your site.
- New waste treatment equipment.
- Implementation of new control measures.

SECTION 9 – REPORTING AND NOTIFICATIONS

Within one month of the end of each calendar year, the Company will submit waste returns using the form provided in order to confirm the waste accepted and removed during the previous year.

The Environment Agency will be notified without delay following the detection of:

- Any malfunction, breakdown or failure of equipment or techniques, accident or emission of a substance not controlled by an emission limit which has caused, is causing or may cause significant pollution.
- A fire.
- The breach of a limit specified in the site permit.
- Any significant adverse effect. If any activity gives rise to emissions likely to cause pollution these will be reported to the Environment Agency. This includes emissions of dust, odour, noise, vibration and/ or liquids.

Written confirmation of actual or potential pollution incidents and breaches of any emission limits will be made within 24 hours.

If notified by the Environment Agency that activities are giving rise to pollution, the operator will submit a relevant management plan to cover the activity/ pollution type (e.g. dust, odour, noise, vibration or liquid emissions) and implement the approved plan from the date of approval, unless otherwise agreed in writing by the Environment Agency.

The Environment Agency will also be informed within the timescales specified following any request for monitoring or spot sampling.

The Environment Agency will also be notified within 14 days of other changes, including:

- Any change to the operator trading name, registered name or address or steps taken with a few to entering into administration, company voluntary agreement or being wound up.
- The death of any named operator.

Any change in the operator's name or address and any steps taken with a view to the operator going into bankruptcy, entering into a composition or arrangement with creditors.