GOLDSTAR METAL TRADERS LIMITED

APPLICATION FOR A BESPOKE PERMIT FOR A SECTION 5.4 PART A (1)(b)(iv) ACTIVITY (METALS RECYCLING)

AT LODGE FARM MARCH, CAMBRIDGESHIRE

VOLUME 3 – ENVIRONMENTAL RISK ASSESSMENT

DECEMBER 2019

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SECTION 1 INTRODUCTION

1.1 Goldstar Metal Traders owns and operates the materials recycling facility at Lodge Farm, near March, Cambridgeshire.

1.2 The site specialises in bespoke recycling operations accommodating a range of waste types, including:

- ferrous metals;
- non ferrous metals;
- End of Life Vehicles or ELV;
- Electrical waste or WEEE; and
- mixed industrial materials.

1.3 To date, the site has been operated under a range of Exemptions from Waste Management Licensing as registered under reference WEX071658.

1.4 In addition to the above, the site benefits from a Standard Rules Permit (Ref EPR/LB733DN) for the treatment of up to 75,000 tonnes per annum of End of Life Vehicles.

1.5 Liaison with the Environment Agency has identified that by virtue of the capacity of the operations, and the mechanical nature of treatment, a bespoke permit is required to effectively regulate the activities. This application therefore seeks to vary/supersede/replace the current Standard Rules Permit and the T9 Exemption in place at the site.

1.6 This document comprises an assessment of the potential emissions associated with the metals recycling operations (including WEEE and ELV materials). 1.9This document will examine in detail each element of the process and stipulate the control and mitigation measures available to ensure full compliance with the relevant sector guidance comprising the following:

- Sector Guidance S5.06: recovery and disposal of hazardous and non-hazardous waste;
- HSE Guidance on scrap and metal recycling;
- HSE Guidance on End of Life Vehicles;
- EA technical guidance on Fire Prevention Plans;
- EA technical guidance on Development of Management Systems

1.7 This volume forms part of the EMS for the site, setting out the Environmental Risk Assessment. The baseline for the site (including the identification of vulnerable locations) is provided at Volume 1 of the application (Site Condition Report). Volume 2 provides the operational context consistent with the EA guidance. The documents should be viewed as a whole EMS.

1.8 This Volume will cover the six potential emission pathways identified in the EA guidance, namely:

(i) emissions to air;

(ii) emissions to surface water;
(iii) emissions to sewer;
(iv) emissions to groundwater;
(v) emissions to land; and
(vi) environmental (or occupational) emissions – including noise, dust and waste.

1.9 It will also detail the monitoring regimes applicable to each potential emission, to provide a framework suitable for use under an Environmental Permit.

1.10 It should be noted that whilst Lodge Farm itself is a residential premise, it is vacant in operational hours of the day as it houses the technical manager for the site. As such it is not considered to be a sensitive receptor or a vulnerable location.

1.11 This document will be maintained as live and will therefore be subject to regular audit and review to include ad hoc updates as required.

SECTION 2 SCOPE FOR EMISSIONS

2.1 Emissions to Air

2.1.1 The operations involve the use of fixed and mobile plant and equipment to handle and process a range of metals (refer to Section 4 of Volume 2 for further details). Some of this is mains powered and other powered by conventional combustion units.

2.1.2 The only fixed plant of size is the Leimbach Mechanical Shear which is an electrical main powered unit, this is time will be supported by a fragmentiser, which will be installed as a modular low-level mobile system at the site, benefitting from purpose designed acoustic cladding and dust control and mitigation systems as required.

2.1.3 The only scope for emissions to air is therefore associated with mobile plant activity, and emissions from the ELV process. However the latter is undertaken in an enclosed environment consistent with best practice guidance with no emissions to the open air.

2.2 Emissions to Surface Water

2.2.1 The site benefits from an integrated drainage system aimed at ensuring all the runoff from the surfaced yard space is captured, attenuated and treated through silt traps and interceptors prior to discharge via soakaways.

2.2.2 There are no point source emissions from the site into the surrounding IDB drainage network. There are no package treatment systems or monitoring installations on site.

2.3 Emissions to Sewers

2.3.1 There are small volumes of discharge to the foul sewer system, comprising; foul effluent from administrative and welfare facilities. There are no discharges from the process activities on site.

2.3.2 There are facilities on site in this regard with a package treatment plant mainly associated with the administrative and welfare facilities situated in the west of the site.

2.4 Emissions to Groundwater

2.4.1 There will be no point source or diffuse discharges to the groundwater system.

2.4.2 In any event the site will not be in continuity with the groundwater system due to the presence of the impermeable surface upon which the site operates.

2.5 Emissions to Land

2.5.1 There will be no emissions to land.

2.6 Environmental Emissions

2.6.1 Emissions in this regard can be categorised under four sub-headings, namely:

(i) noise;
(ii) dust;
(iii) waste; and
(iv) odour.

There are no processes or activities that would cause any issues with pest control.

(i) Noise

2.6.2 The site and activities therein are relatively remote from residential amenity. The nearest potential receptor is over 500m away which is beyond the distance where noise wouldn't necessarily be a concern. However consistent with EA recommendations a noise assessment and a Noise and Vibration Management Plan have been provided in support of the application and standalone from this volume.

2.6.3 Some of the process is enclosed within the units on site, but others are concealed behind the perimeter bunds and walls, and hence the scope for adverse emissions is minimal.

(ii) Dust

2.6.5 The site and activities therein are relatively remote from residential amenity. The nearest potential receptor is over 500m away which is beyond the distance where dust would be a concern.

2.6.6 The activities on site do not include processes that are at risk of generating high levels of dust, with no need for active dust suppression on site. In any event that site will benefit from suitable housekeeping measures to prevent and limit any emissions i this regard to include:-

- dust suppression in extreme dry conditions;
- effective stockpile management; and
- site speed limits.

The site is not within a 500m radius of a sensitive receptor or within proximity of an AQMA and as such a Dust Management Plan isn't considered to be necessary.

(iii) Waste

2.6.7 The activities undertaken on site in particular in association with the ELV operations will result in the generation of certain waste materials.

2.6.8 None of this material will be retained on site: wherever possible it will be recycled to derive a product, and where this is not possible the materials will be disposed of at an appropriately licensed facility, using the correct physical and administrative procedures for the given waste type.

(iv) Odour

2.6.9 Due to the nature of the materials being handled at the installation and the short residence time on site, there is limited scope for offensive odour emissions. However, the enclosed nature of the more sensitive operations (such as the ELV facilities), allied to continued good practice (i.e. good house maintenance) will ensure compliance with the requirements of the permit.

2.6.10 In the context of the above and consistent with EA guidance it is not considered necessary to provide an Emissions Management Plan as the risk of impact is negligible.

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SECTION 3 MONITORING REQUIREMENTS

3.1 General

3.1.1 As identified in Section 2 above, there no point source emission points but it is acknowledged that there is scope for potential diffuse environmental emissions.

3.1.2 This subsection will define the monitoring standards that are applicable and define the actual monitoring protocols that will be put in place where required.

3.2 Monitoring Standards

3.2.1 The Environment Agency has adopted a series of monitoring technical guidance notes, which air mainly linked into emissions from air.

3.2.2 Where required monitoring and sampling equipment and contractors will be sourced in accordance with UKAS accreditation, including calibration and certification procedures.

3.2.3 Any monitoring records will be kept on site for a minimum period of two years and be made available to the EA on request in accordance with the Permit Conditions.

3.2.4 Full notification procedures will be followed for compliance monitoring and records will be submitted in a timely manner. Any adverse results from monitoring activity will be investigated by the operator to identify the cause and take necessary corrective or preventative steps.

3.3 Process Monitors

3.3.1 There are no requirements for such systems.

3.4 Air Monitoring

3.4.1 There are no requirements for such systems.

3.5 Emissions to Water

3.5.1 There are no routine monitoring requirements in this regard, other than visual checking and spot sampling in accordance with manufactures recommendations. This is proposed to remain the case.

3.6 Environmental Monitoring

3.6.1 At present there are no plans for the monitoring of noise emissions from occupational activity, nor any other amenity-based frameworks. A noise assessment and a Noise and Vibration Management Plan have been provided in support of the application and standalone from this volume. This includes suitable monitoring provisions in accordance with the EA guidance.

SECTION 4 POTENTIAL IMPACTS

4.1 General

4.1.1 Consideration of the potential impacts of the proposal has been reviewed in the supporting statement which accompanied the planning application which covered a range of criteria including:

- landscape and visual;
- hydrology and hydrogeology; and
- noise.

4.1.3 None of the assessments that were considered in support of the application identified scope for adverse impact that would prevent the release of any planning consent.

4.1.3 The remainder of this section will consider the scope for impacts associated with the emission types highlighted in section 2 above.

4.2 Emissions to Air

4.2.1 The main risk is associated with mobile plant activity; however the site is situated in a rural environment and therefore would benefit from large areas of dispersal.

4.2.2 The size and capacity of the activities undertaken will have no discernible air quality impacts including en route to and from the permit area.

4.3 Emissions to Surface Water

4.3.1 There are no changes to the existing approved surface water regime, nor drainage arrangements on site, and therefore no changes anticipated in emission levels.

4.4 Emissions to Sewer

4.4.1 There are no changes to the existing approved foul water discharge arrangements, and therefore no impacts are anticipated as there is no connection to any mains assets.

4.5 Emissions to Groundwater

4.5.1 As there will be no point source discharges to any groundwater receptors, no impact is anticipated.

4.6 Emissions to Land

4.6.1 As there will be no point source or diffuse discharges to any land receptors, no impact is anticipated.

4.7 Health Impacts

4.7.1 In an air quality and odour context, the proposals do not constitute a threat to human health.

4.7.2 Similarly, in the context of the acoustic environment, the distance from source (i.e. the site) to receptor (i.e. residential premises) is such that there is little to no scope for impact. A noise assessment and a Noise and Vibration Management Plan have been provided in support of the application and standalone from this volume.

SECTION 5 OCCUPATIONAL ENVIRONMENT

5.1 The occupational environment within the site (both enclosed and external) will be maintained in a clean condition. The nature of the process will mean that aside from the mobile plant activity there will be minimal noise output. A noise assessment and a Noise and Vibration Management Plan have been provided in support of the application and standalone from this volume.

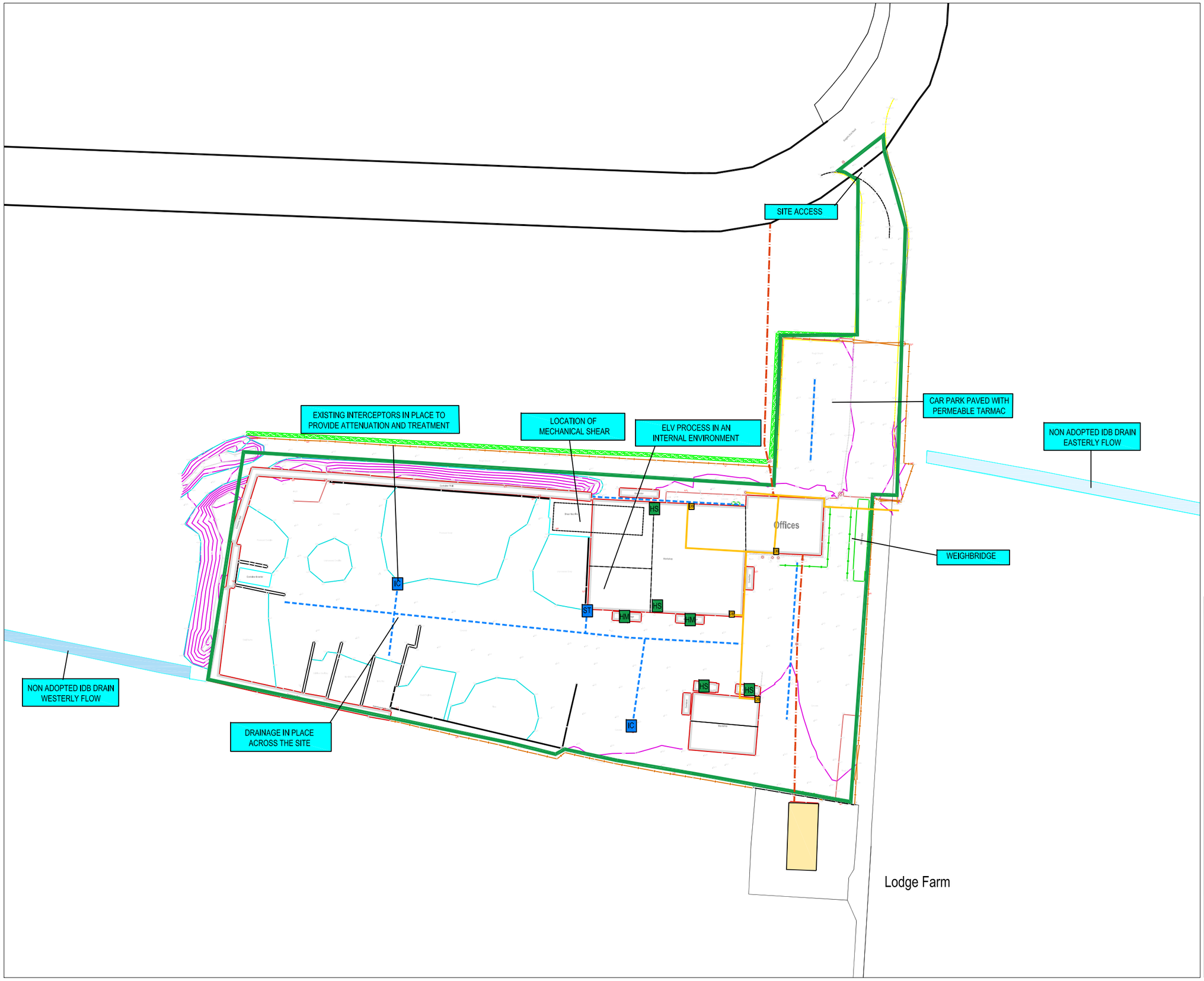
5.2 There are no requirements for the monitoring of the occupational environment. Instead, zones of potential hazard (in respect of noise, dust and potentially harmful substances) will be identified around the following features:

(i) pressure release valves;
(ii) oil input points (including lubricating oil, transmission oil on fixed and mobile plan);
(iii) the mechanical shear; and
(iv) the proposed fragmentiser.

5.3 As the scope of emissions is minimal, this management-based approach to keep employees away from the source is considered the best way to maintain a safe occupational environment. In this regard a health and safety policy is maintained as a live document with actions and objectives updated as required.

Appendix A

Emissions Plan



GRID NORTH

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LEGEND

- APPLICATION SITE
- POWER
- DB — DISTRIBUTION BOARD
- SURFACE WATER DRAIN
- IC — INTERCEPTOR
- ST — SILT TRAP
- FOUL DRAINAGE
- HM — HAZ MAT STORE
- HS — HYDROCARBON STORE

Scale Bar: 0m 10m 20m 30m 75m

GOLDSTAR

Location: Lodge Farm (Environmental Permit)		
Title: Emissions and Drainage Plan		
Drg.No. L24/3/1004A	Scale 1:1,000@A3	Date 07/19

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