



Scarborough Borough Council

Pollution Prevention and Control Act 1999

The Environmental Permitting (England and Wales) Regulations 2016

Process Permit	Part A2
Permit Referencel	17/00001/A2

Operator	Legrand Electric Limited
Installation Address	Cayton Low Road Eastfield Scarborough YO11 3BY
Registered Office	Legrand Electric Limited Great King Street North Birmingham B19 2LF

Legrand Electric Limited is hereby permitted by Scarborough Borough Council to carry on a surface treatment of metals activity followed by a dip galvanising activity in conjunction with the melting of zinc and zinc alloy activity as prescribed in Schedule 1, Part 2, Chapter 2, Section 2.3 Part A2(a) and Schedule 1, Part 1, Chapter 2, Section 2.2 Part B(c) of The Environmental Permitting (England and Wales) Regulations 2016.

Date: 14 December 2017

Signed: 

Environment & Regulation Manager

Regulator Contact Details

Scarborough Borough Council
Commercial Regulation Team
Environmental Services
Town Hall
St Nicholas Street
Scarborough
YO11 2HG

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Introduction

Location of Installation:

Legrand Electric Limited is located on the outskirts of Eastfield, Scarborough on an industrial and commercial estate as shown marked in red on the plan in Appendix 1 of this permit. The installation is separated from residential properties by a main road, B1261, and there is a culverted beck running to the west of the site.

Process description:

Legrand Electric Limited manufactures steel components which are hot dip galvanised to protect against corrosive environments. The galvanising operation is a batch process that runs on two separate lines and involves the pre-treatment of steel components prior to galvanising. Line 1 is used to galvanise straight lengths and larger items, and Line 2 is used to galvanise small and ancillary items.

The steel items are immersed into treatment tanks using a series of jigs or baskets, firstly into a heated alkaline de-greasing solution, followed by acid treatment and pre-flux dipping with rinse stages inbetween. The items are air dried before being galvanised in a bath of molten zinc operating at a temperature of around 450 degrees Celsius. The capacity of each treatment bath is between 8,000 and 18,000 Litres and the zinc kettles contain 45 tonnes and 75 tonnes of molten zinc.

The zinc kettles, degreasing baths and drying deck are heated by mains natural gas.

The zinc kettles are provided with a shared extraction ventilation system that discharges to a single stack after passing through a filtration system.

Ash is manually scraped from the surface of the zinc kettle and dross is periodically removed by dredging.

The galvanised items undergo passivation treatment to stabilise them and they are stored on-site prior to dispatch.

Permit Conditions

1. General Conditions

- 1.1 The conditions contained in this permit shall take immediate effect unless stated otherwise in the individual condition.
- 1.2 A copy of this permit must be kept in a prominent place and be made available at all times for reference by staff whose duties are relevant to the undertaking of the permit.
- 1.3 Permitted activities shall only be carried out within the boundary of the site as shown in red on the plan in Appendix 1 of this permit.
- 1.4 The Operator shall notify the Regulator at least 14 days in advance of any change in operation of the installation which may have consequences for the environment. The notification shall be made in writing and must contain a description of the proposed change. For the purpose of this condition change in operation means a change in the nature or functioning of the installation or an extension of the installation. Written approval must be obtained prior to any such change or modification.
- 1.5 Best Available Techniques (BAT) shall be used to prevent or, where that is not practicable, reduce emissions from the installation in relation to any aspect of the operation which is not regulated by any other condition of this permit.

2. Emissions to Air : Limits and Controls

- 2.1 There shall be no point source emissions to air except from stacks X and Y as shown on the plan in Appendix 2 and photographs in Appendix 3 and Appendix 4. Stack X serves the zinc kettles and stack Y serves the chromate tank.
- 2.2 The limits given in the following table shall not be exceeded:

Source	Pollutant	Emission Limit
Galvanizing Baths	Particulate Matter	15mg/m ³
Fugitive Emissions from galvanizing baths	Particulate Matter	No persistent visible emission

- 2.3 Stack X shall be fitted with a continuous indicative monitor for particulate matter emissions.
- 2.4 The operator shall use monitoring equipment and instruments certified to MCerts standards and use organisations accredited to MCerts¹ standards.
- 2.5 Emissions of total particulate matter shall be continuously indicatively monitored in the stack downstream of the abatement plant.
- 2.6 The abatement plant shall consist of a bag filter and perlite filter medium.

¹ The Environment Agency's Monitoring Certification Scheme

- 2.7 The galvanising bath on line 1 shall be provided with full enclosure and extraction hood and discharge to air via the abatement plant.
- 2.8 The doors to the enclosure on line 1 must be kept closed and the extraction system operating when galvanising is taking place, other than the operator hatch for working the ash, until fume has cleared.
- 2.9 The galvanising bath on Line 2 shall be provided with lip extraction and discharge to air via the abatement plant.
- 2.10 Galvanising must not be carried out unless the fume extraction system and filtration system are operating correctly.
- 2.11 The damper on the extraction system shall be properly positioned to ensure that fumes are extracted effectively from either Line 1 or Line 2. The galvanising baths must not be operated at the same time.
- 2.12 Ash bins must be provided with extraction when ash is being scraped from the surface of zinc baths into ash bins.
- 2.13 Extraction must be operating when dross is being dredged from the bottom of the zinc baths into dross bins.
- 2.14 All emissions to the external air, other than steam or condensed water, shall be free from droplets, persistent mist, persistent fume and particulate matter.
- 2.15 All emissions from the installation shall be free from offensive odours when assessed by the Regulator at the site boundary.

3. Emissions to Land: Limits and Controls

- 3.1 There shall be no direct emissions to land.

4. Emissions to Controlled Waters: Limits and Controls

- 4.1 There shall be no direct emissions to controlled water².

5. Emissions to Foul and Surface water sewer: Limits and Controls

- 5.1 There shall be no direct emissions to sewer.

6. Emissions to Ground water: Limits and Controls

- 6.1 There shall be no point source emissions to groundwater.

² Such emissions would be subject to a stand-alone permit issued and administered by the Environment Agency.

7. Other Controls

- 7.1 All treatment tanks must be located within bunds or be sited within areas of impervious hardstanding which drain into sumps. Liquid must be contained and emptied for disposal as special waste.
- 7.2 Bunds must be self-contained and must not drain into the drainage system for the installation.
- 7.3 Bunded areas shall have at capacity of at least 110% of the largest tank.
- 7.4 The floor of the installation shall be provided with concrete hardstanding or other impervious covering and kept in a well maintained condition.
- 7.5 The horizontal and vertical speed of the hoists / jigs in pre-treatment and galvanizing processes shall be slow enough to prevent splash and drip outside of the bunded areas.
- 7.6 The extraction system shall be utilised properly to minimise emissions to air via roof vents and other openings.
- 7.7 Ash shall be kept dry at all times and be stored in suitable containers.
- 7.8 The 'spent' perlite medium shall be collected in bags and disposed of as special waste. The waste shall be handled carefully to minimise dust emissions.
- 7.9 Preventative measures must be taken to control fugitive emissions of zinc and ammonia from contaminating surface water from roof and yard run-off.

8. Materials Handling and Storage

- 8.1 Deliveries to and collections from the site must be carried out in such a way so as to minimise spillages, leaks, dust and noise.
- 8.2 Storage areas shall be under cover and protected from the elements, except where materials are stored in suitable weather-proof containers.
- 8.3 All spillages must be cleared up as soon as possible. Spillages of solids / dusty materials by vacuum cleaning or other appropriate methods to prevent the generation of airborne dust. Spillages of liquids by addition of absorbent material or by run-off to a contained drainage system.
- 8.4 A high standard of housekeeping must be maintained.

9. Waste Materials and Waste Minimisation

- 9.1 A waste management plan shall be produced for the installation.
- 9.2 A record of all waste produced by the installation shall be kept and used for benchmarking purposes.

- 9.3 All waste shall be removed from the site for recycling or disposal by licensed waste carriers.
- 9.4 All potentially polluting waste shall be covered and secured prior to collection for recycling or disposal.
- 10 Energy Efficiency
- 10.1 Appropriate measures shall be taken to ensure that energy is used efficiently and energy loss minimised throughout the Permitted processes. Techniques such as heat recovery and good insulation should be considered.
- 10.2 An annual report must be produced on the energy consumption of the installation and be made available to the Regulator on request.
- 10.3 The Operator shall review energy consumption and implement any identified improvements on an annual basis.
11. Efficient use of Raw Materials
- 11.1 Appropriate measures shall be taken to ensure that raw materials, including water, are used efficiently throughout the Permitted Process.
- 11.2 An annual report must be produced on the consumption of raw materials at the installation and be made available to the Regulator on request.
- 11.3 The Operator shall review the consumption of raw materials and implement any identified improvements on an annual basis, including the use of alternative raw materials to minimise any environmental impact.
12. Noise and Vibration
- 12.1 All plant and equipment must be properly maintained and operated in such a way as to minimise noise from the installation. Appropriate noise attenuation measures shall be employed to mitigate against noise.
- 12.2 Shutter doors to the installation shall be kept closed during the night³. If access is essential the shutter doors should be opened for the shortest time possible.
- 12.3 Blowing down of the bag filter shall not be undertaken during the night.
13. Maintenance
- 13.1 A written preventative maintenance programme shall be implemented.
- 13.2 All tanks, bunds and sumps shall be well maintained and be subject to visual inspection at least once per month.
- 13.3 Records of inspections must be kept and be made available to the Regulator on request.

³ "night" means between the hours of 11pm and 7am

14. Monitoring

14.1 Monitoring must be carried out in accordance with the table below:

Pollutant	Emission Limit	Type of Monitoring	Frequency of Monitoring
Total Particulate Matter*	15mg/m ³	Manual Extractive Test to comply with BS ISO 12141:2002 or BS EN 13284: Part 1 or of any update thereof	Annually
Total Particulate Matter*	15mg/m ³	Indicative Monitoring	Continuous
Fugitive emissions from galvanising baths	No persistent visible emission	Visual observations by the Operator	Daily
General Malodour	No persistent offensive odours	Olfactory assessment by the Operator	Weekly

(*All emission concentrations shall be expressed at reference conditions of 273K and 103kPa without correction for water vapour).

- 14.2 The MCerts standards shall be applicable to all monitoring exercises and instrumentation.
- 14.3 Emissions from the stack shall be continuously indicatively monitored for particulate matter and the results recorded.
- 14.4 Continuous monitoring equipment shall be checked daily and calibrated in accordance with the manufacturer's instructions at least once every 12 months.
- 14.5 The introduction of diluted air to stack emissions to achieve concentration limits shall not be permitted.
- 14.6 The continuous particulate monitor shall be connected to an audible and visual alarm system that activates when emissions of total particulate matter reach 75% of the emission limit.
- 14.7 Safe means of access shall be provided for monitoring and sampling purposes.
- 14.8 The Operator shall notify the Regulator at least 7 days in advance of any periodic monitoring exercise to determine compliance with limit values. The Operator shall state the provisional time and date of monitoring.
- 14.9 The results of non-continuous emissions testing shall be forwarded to the Regulator within 8 weeks of the completion of the sampling.
- 14.10 Surface water testing for concentrations of zinc and ammonia in surface water run-off must be undertaken if requested by the Regulator.

15. Management and Training

- 15.1 The installation shall be managed and operated in accordance with an effective Environmental Management System.
- 15.2 The current Environmental Management System accredited to ISO 14001 and ISO 150001, or equivalent, should be maintained and improved upon wherever possible.
- 15.3 As a minimum the Environmental Management System shall include the following:
- Identification, assessment and minimisation of any risks of pollution.
 - Accident management ⁴
 - Maintenance programme
 - Staff training programme
 - Waste management plan
 - Energy efficiency plan
- 15.4 The installation shall be managed and operated by sufficient persons who are suitably qualified, experienced, trained and supervised in respect of the duties to be undertaken in connection with the installation.
- 15.5 All relevant staff shall receive appropriate training and instruction in their duties relating to the installation. As a minimum the training shall include:
- Awareness of responsibilities under the Environmental Permit
 - Awareness of the potential environmental impacts under normal and abnormal circumstances
 - Emissions monitoring
 - Visual and olfactory observations
 - Preventative maintenance
 - Accident prevention and response
 - Minimising energy use and waste generation
- 15.6 Training records should be retained and be made available to the Regulator on request.

16. Records

- 16.1 The following records and documentation shall be kept for a minimum of 4 years and be made available to the Regulator on request:
- Environmental Management system
 - Maintenance programme and maintenance records
 - Accidents
 - Results of all non-continuous and continuous monitoring
 - External audits
 - Waste management system
 - Energy efficiency
 - Consumption of raw materials
 - Decommissioning programme

⁴ "Accident" means an accident that may cause pollution

17. Accident Management Plan

- 17.1 There shall be a written Accident Management Plan for the installation.
- 17.2 The Accident Management Plan shall identify the hazards, assess the risks and identify the measures required to reduce the risk of potential events and failures that might lead to an impact on the environment.
- 17.3 The Plan shall include written procedures for investigating accidents and near misses.
- 17.4 The Operator shall keep a record of all accidents and near misses which shall be made available to the Regulator on request.

18. Accidents and Reporting

- 18.1 The Regulator shall be contacted without delay following an incident or accident significantly affecting the environment.
- 18.2 In the event of abnormal emissions, malfunction or breakdown leading to abnormal emissions the Operator shall:
- Investigate immediately and take remedial action;
 - Adjust the process or activity to minimise those emissions;
 - Promptly record events and corrective actions taken, and
 - Notify the Regulator.
- 18.3 In the event of adverse results from any monitoring activity (both continuous and non-continuous) the Operator shall:
- Investigate the cause immediately;
 - Carry out corrective action as soon as is practicably possible;
 - Record as much detail as possible regarding the cause and extent of the problem and the action taken to rectify the situation;
 - If relating to stack testing, undertake re-testing to demonstrate compliance as soon as possible, and
 - Notify the Regulator.

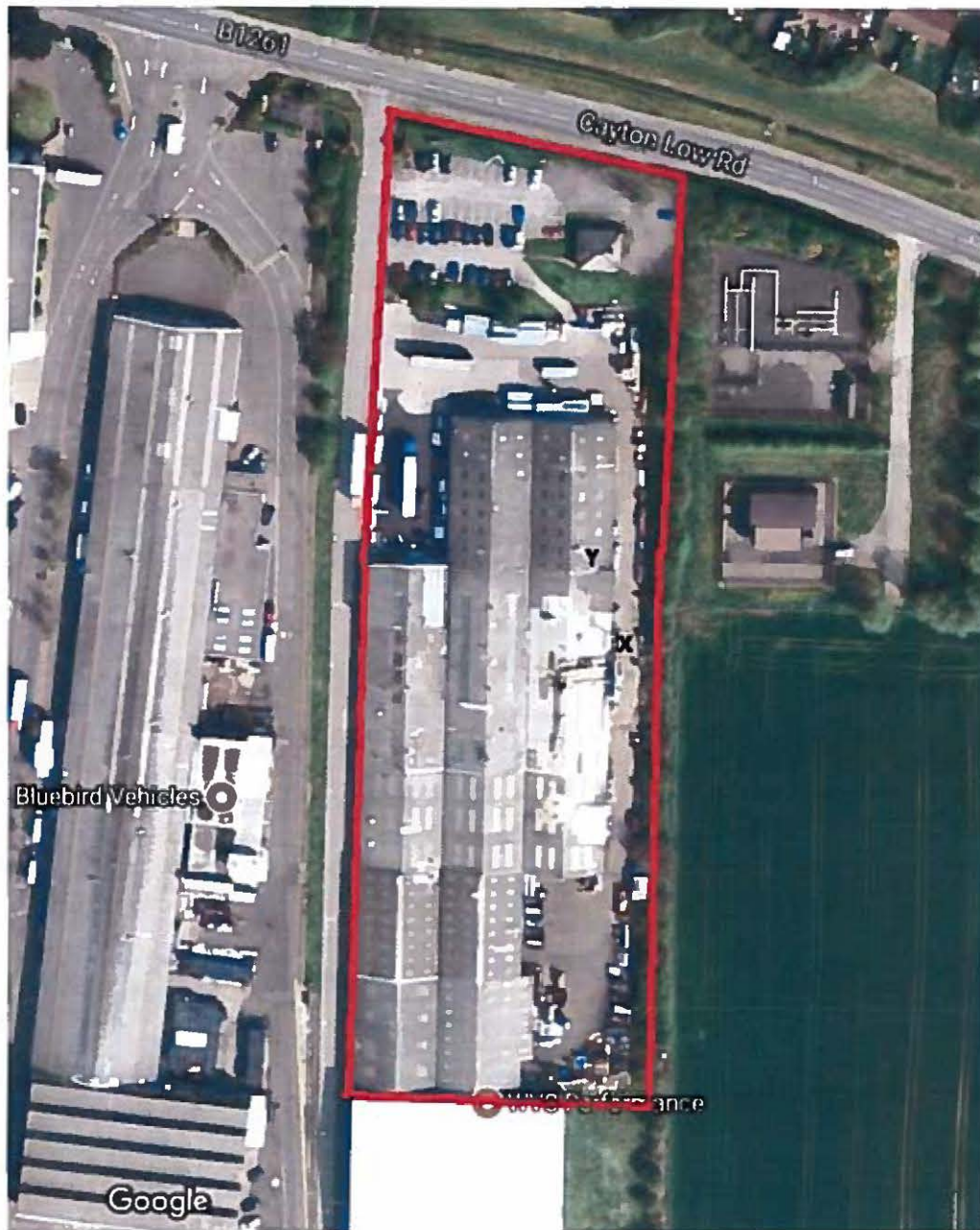
19. De-commissioning

- 19.1 The Operator shall keep a scheme of works for decommissioning the installation. Upon cessation of activities the installation shall be decommissioned in accordance with the scheme.
- 19.2 Prior to cessation of permitted activities, the Operator shall submit a method statement for intrusive sampling of land to the Regulator. Once agreed, the Operator shall carry out the intrusive sampling and forward the results within 8 weeks of sampling to the Regulator. The Operator shall then undertake remediation of the land to a level and within timescales agreed in writing by the Regulator, in order to remove contamination that may be attributable to permitted activities.

Appendix 1



Appendix 2



Appendix 3



Appendix 4

