HULL CITY COUNCIL

Pollution Prevention and Control Act 1999

The Environmental Permitting (England and Wales) Regulations 2016

Application Received: 30th July 2004

Environmental Permit No. EPA/130/Rev7

Issue Date:

Address of Permitted Activity

Humber Galvanizing Limited

Unit J

Citadel Trading Park

Kingston upon Hull

HU9 1TQ

B E Wedge Holdings Limited, trading as Humber Galvanizing Limited of Stafford Street, Willenhall, West Midlands, WV13 1RZ are hereby permitted to carry out the activity of surface treating metals, at their installation address; Humber Galvanizing Limited, Unit J, Citadel Trading Park, Kingston upon Hull, HU9 1TQ as shown by the area outlined in red on the attached plan reference Humber Plan 1 (the area of the installation).

Introductory Note

The following environmental permit is issued under Regulation 13 of the Environmental Permitting (England and Wales) Regulations 2016, as amended to operate an installation which carries out an activity covered by the descriptions in Section 2.3, Part A2(a) to Schedule 1 of the EP Regulations and a directly associated activity under Section 2.2 Part B(c) of the EP Regulations, in accordance with the following permit conditions.

Section 2.3 A2(a) states that an installation will require an A2 environmental permit to operate if the activity carried on there involves surface treating metals and plastic materials using an electrolytic or chemical process where the aggregated volume of the treatment vats is more than $30m^3$ and where the activity is carried out at the same installation as one or more activities falling within:

(i) Part A2 or B of Section 2.1 (ferrous metals)

(ii) Part A2 or B of Section 2.2 (non-ferrous metals) or

(iii) Part A2 or B of Section 6.4 (coating activities, printing and textile treatments)

Within this Environmental Permit advisory notes are included within each section. Environmental Permit conditions are clearly marked from 1.1 to 17.2. The various sections of the Environmental Permit are as detailed below. Although potential emissions are described for each activity carried out at the installation, for example pickling in Section 3 and rinsing in Section 4, conditions relating to those activities are also contained within various sections of the Environmental Permit.

The Environmental Permit therefore should be read as a complete document and not as 17 individual documents according to the number of sections.

Sections of Environmental Permit

Section 1	Delivery and Storage of Raw Materials
Section 2	Degreasing
Section 3	Pickling
Section 4	Rinsing
Section 5	Fluxing
Section 6	Galvanizing
Section 7	Post Treatment/Passivation
Section 8	Emissions Control and Monitoring
Section 9	Emissions to surface water and sewer
Section 10	Environmental Management
Section 11	Waste
Section 12	Energy
Section 13	Accidents
Section 14	Noise and Vibration
Section 15	Monitoring
Section 16	Decommissioning
Section 17	General

Humber Galvanizing Limited

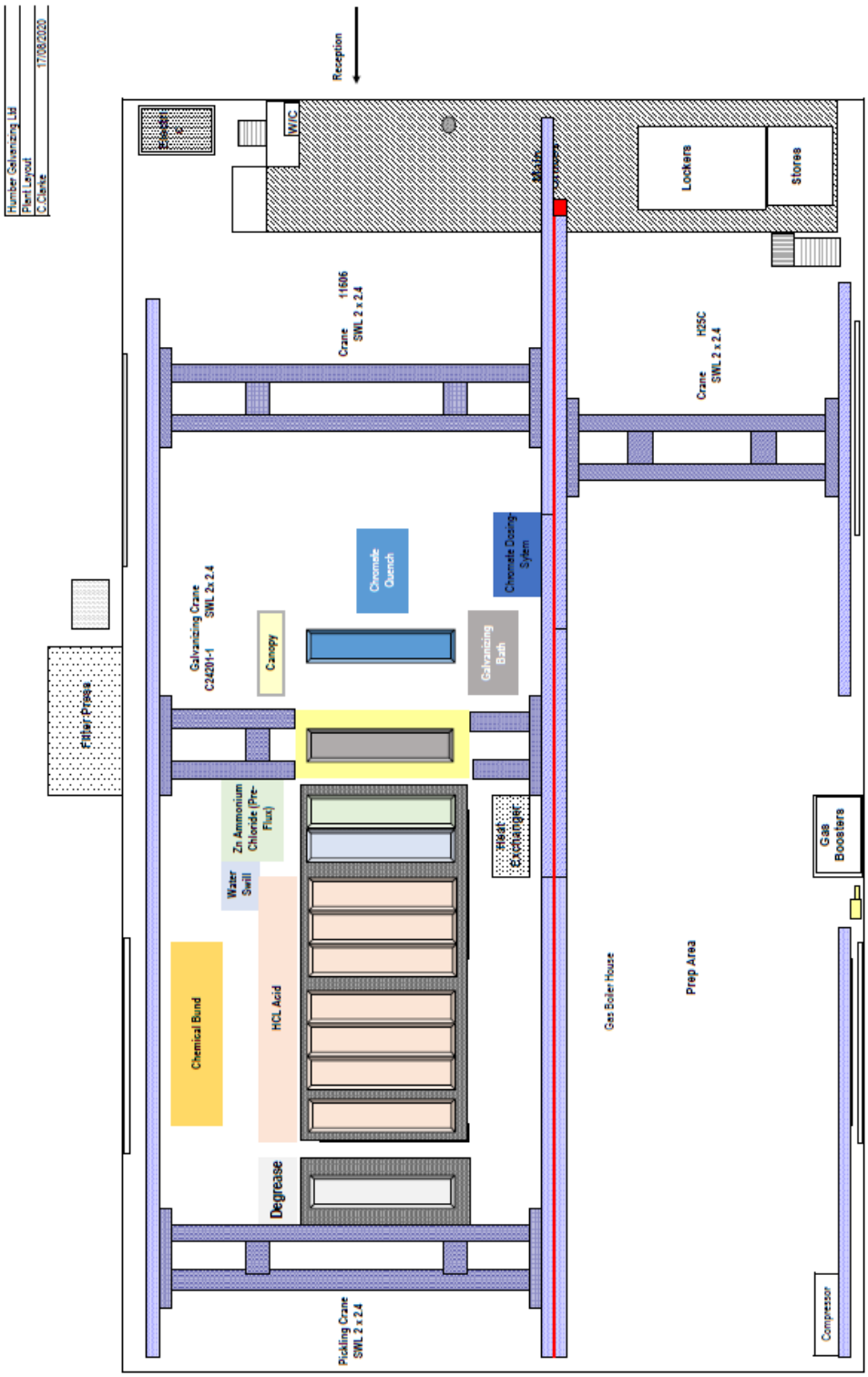
Environmental Permit Reference No: EPA/130/Rev7

Plan Ref. No. Humber Plan 1

Humber Galvanizing Limited

Environmental Permit Reference No: EPA/130/Rev7

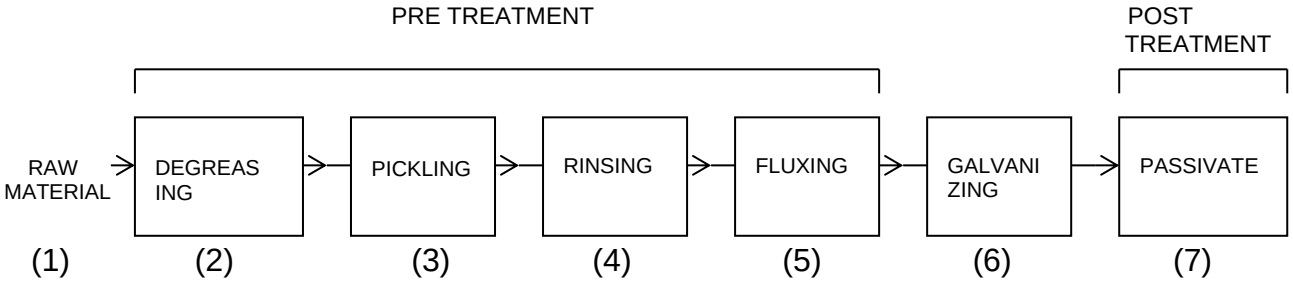
Plan Ref. No. Humber Plan 2



Humber Galvanizing Limited

Environmental Permit Reference No: EPA/130/Rev7

Plan Ref. No. Humber Plan 3



(1) Environmental Impact
water – spillage during delivery
land – spillage – overfilling of containers
accidents – overfilling/leakage from containers
noise – vehicles and deliveries

(2) Environmental Impact
waste – sludge – off site waste disposal
energy – required to maintain degrease solution at 40-65°C
accidents – spillage

(3) Environmental Impact
air – hydrochloric acid fumes (fugitive)
waste- used liquor to off-site waste treatment
accidents – spillage

(4) Environmental Impact
waste – used rinsing liquor – taken off site for treatment

(5) Environmental Impact
air – steam
waste – sludge – off site waste disposal
energy – required to maintain flux solution at 55-80°C
accidents – spillage

(6) Environmental Impact
air – potential emissions from fume and steam
energy – used to maintain zinc at 440-452°C – reuse of waste heat
waste – dross, ash – sold as by product
noise – extraction fans

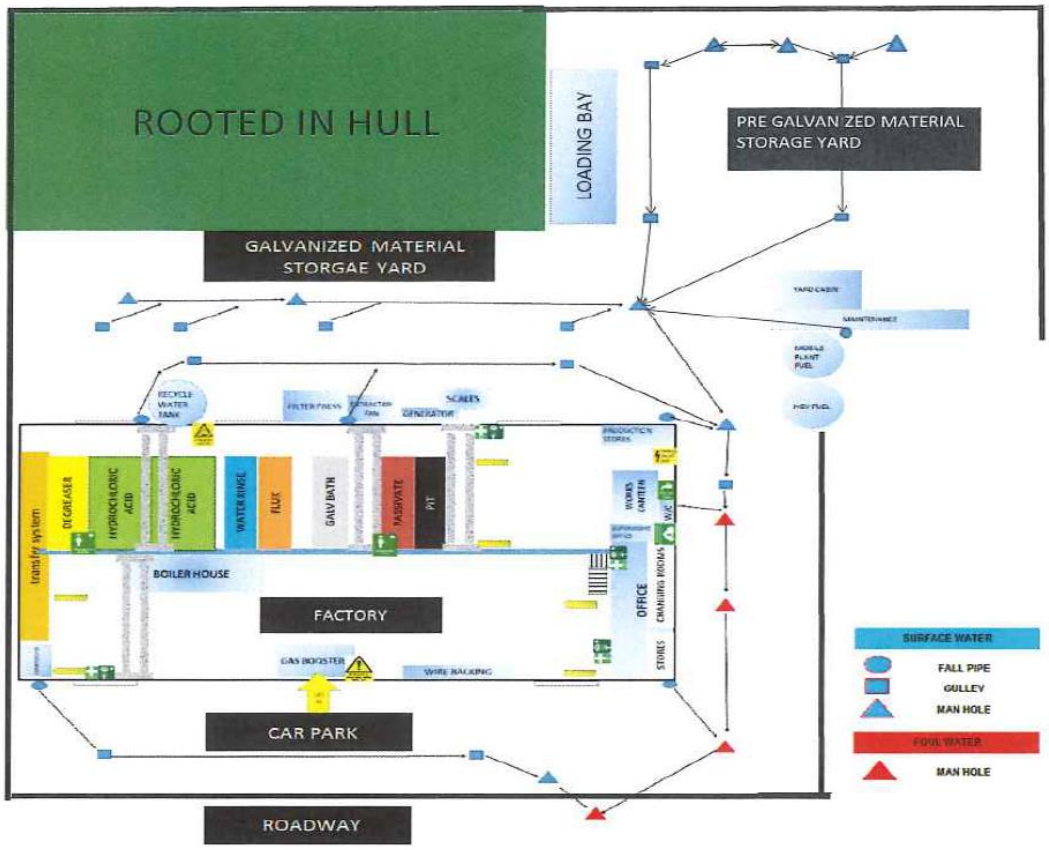
(7) Environmental Impact

air – steam from quenching
land – sludge to be disposed of
water – used for quenching
accidents – spillage from the passivation tank/storage of the passivation proprietary agent

Humber Galvanizing Limited

Environmental Permit Reference No: EPA/130/Rev7

Plan Ref. No. Humber Plan 4



Description of Activity

The galvanizing process involves pre-treating steelwork components and fabricated items in various solutions, known as the ‘pre-treatment’ stage, prior to dipping into a bath of molten zinc.

The galvanized product is then left to cool by air or is quenched into a further process tank which is known as the passivation stage.

The pre-treatment line involves the following:

Degreasing

The material is immersed in a tank containing a proprietary degreasing solution. This removes any oil or grease contaminants that may be present on the surface of the product.

Steam emissions are given off to atmosphere from the surface of the tank.

Pickling

The material is immersed in a tank containing dilute hydrochloric acid. This removes any surface rust and/or millscale which is on the product.

Rinsing

After the work has been pickled correctly, it is immersed in a static water rinse tank in order to wash away the acid from the surface.

Fluxing

After the work has been rinsed, it is immersed in a hot pre-flux tank (55-80°C), in order to prevent any oxidation taking place prior to the work being dipped in the molten zinc.

Steam emissions are given off to atmosphere from the surface of the tank.

The fluxing operation used at Humber Galvanizing is known as ‘dry fluxing’ with a special ‘low fume flux’ being used in an aqueous solution. This special flux is used to vastly reduce fume emissions created at the galvanizing bath when the work is lowered into the molten zinc.

Galvanizing

The galvanizing stage is carried out after the work has been pre-fluxed. The material is lowered into molten zinc, with the tank holding the zinc at a temperature of between 440-452°C.

As the material is lowered into the zinc, the temperature is brought up to the same temperature as the molten zinc and a metallurgical reaction takes place which creates zinc/iron alloy layers at the surface.

As the material is being lowered into the zinc, a fume is given off from the dried preflux film on the surface of the work and this is contained within a steel enclosure above the galvanizing bath.

Whilst the material is undergoing the galvanized process, the area around the bath is fully enclosed. The only exception to this is when larger items require to be ‘double dipped’.

The fume is extracted from the enclosure and ducted to an external stack where it is released to atmosphere.

The ‘low fume flux’ ensures that emission limits are met without the need for end of pipe abatement.

‘Ash’ is formed on the surface of the galvanizing bath (zinc oxide). This is removed manually by the operators to avoid excessive fume being created. The zinc ash is sold as a by-product.

Post Treatment

After the work has been galvanized, it is immersed in a tank which contains a dilute proprietary passivation solution. Steam is emitted to atmosphere as the work is ‘quenched’.

The various areas of the activity are clearly marked on plan reference number: Humber Plan 2, with the flowchart shown in Humber Plan 3 detailing the various stages.

Conditions of Environmental Permit reference EPA/130/Rev7

Section 1

Delivery and Storage of Raw Materials

All raw materials, other than those on a mains supply (i.e. water and electricity) are delivered to site by road transport. The raw materials used in the activity include:-

- *Degreaser*
- *Hydrochloric acid*
- *Acid inhibitor*
- *Alkaline reagents*
- *'low fume flux'*
- *zinc*
- *zinc alloys*
- *passivation solutions*
- *gas oil*
- *annealed wire*

The potential environmental impacts from delivery and storage of raw materials are as follows:-

(a) Land – spillage/leakage of liquid materials, overfilling of containers.

(b) Water spillage during delivery of liquids followed by run off.

(c) Accidents – overfilling of acid tanks/leakage of liquid materials from containers.

(d) Noise – vehicle and delivery operations may cause noise disturbance, especially if close to the site boundary.

Conditions Relating to Section 1

1.1 The operator shall ensure that during deliveries of raw materials, measures are taken to prevent noise emissions, and prevent spillages and leakages of raw materials.

1.2 All storage areas shall be hard surfaced.

1.3 All raw materials shall be kept under cover.

1.4 Liquid storage areas shall be bunded, where the bunds:

- are impermeable and resistant to the stored materials
- have no outlet and drain to a bund collection point
- have pipework routed within bunded areas with no penetration of contained surfaces
- are designed to catch leaks from tanks or fittings
- have a capacity of at least 110% of the largest tank
- are visually inspected weekly
- spillage materials contained within the bunds are pumped out or manually removed and checked for contamination
- have an annual maintenance inspection

1.5 All spillages shall be cleared as soon as possible, with liquid spillages being cleared by the addition of absorbent material, or by run-off to contained drainage systems.

1.6 A high standard of housekeeping shall be maintained at all times.

1.7 An inventory of all raw materials that are used on site or in stock shall be maintained, and this inventory shall be checked on a weekly basis.

Section 2 – Degreasing

Degreasing is a process whereby oil or grease contaminants that may be present on the materials to be galvanized are removed prior to being pickled.

During operation these contaminants are removed from the surface and fall to the bottom of the tank, forming a sludge residue.

The strength of the solution is checked on a weekly basis, and when this decreases a proprietary degreasing product is added to maintain an adequate level.

The potential environmental impacts from the degreasing activity are as follows:

(a) Waste – sludge taken off site for disposal

(b) Energy – energy required to heat degrease solution – maintain temperature at 40-65°C

(b) Accidents – spillage

Conditions relating to Section 2

2.1 The degreasing bath shall be bunded. The bunding and maintenance of the bund shall be in accordance with Condition 1.4.

2.2 The degrease solution shall be checked on a regular basis to determine the correct strength. Should there be a reduction in solution strength; a proprietary degreasing product shall be added to maintain an adequate level.

Section 3 – Pickling

Pickling is a process whereby the surfaces of the materials to be galvanized are prepared. The pickling process removes rust and millscale from the material. Hydrochloric acid is brought onto the site and diluted for use in pickling baths at ambient temperature.

During operation, the iron content of the pickling bath increases over time, while the amount of free acid decreases. When the bath reaches a composition of approximately 5% acid and 150 g/l of iron, it is no longer effective as a pickling solution and therefore fresh acid is added to the bath as a top up. Iron sludge will also fall to the bottom of the tank and eventually the contents of the whole tank may have to be removed and a 'new' tank made up.

Zinc contamination in the acid will also contribute to a 'weaker' solution, therefore to prevent this a 'stripping' tank is designated for work that contains zinc i.e. rejected work.

The potential environmental impacts from the pickling activity are as follows:

(a) Air – hydrochloric acid fumes (fugitive)

(b) Waste – spent liquor to off-site waste treatment facility

(c) Accidents – spillage

Conditions relating to Section 3

3.1 All pickling baths shall be bunded. The bunding and maintenance of the bunds shall be in accordance with Condition 1.4.

3.2 Pickle liquor shall be checked weekly using a standard titration method to ensure the strength of acid and iron content is within optimum parameters.

Section 4 – Rinsing

After the material has been pickled, the hydrochloric acid is washed from the surface of the material during the rinsing operation in order to prevent contamination of the preflux solution and to reduce the amount of iron 'salts' reaching the galvanizing bath.

The iron starts to precipitate to the bottom of the tank as long as the PH >3. If the rinsing tank becomes too acidic or the iron content is too high, the contents may have to be replaced with fresh water.

The potential environmental impacts from the rinsing activity are as follows:

(a) waste – 'contaminated' water taken off site for treatment and disposal.

Conditions relating to Section 4

4.1 Water from the rinse tanks shall be used as far as practicable to make up fresh new acid tanks or top up acid tanks.

4.2 Water from the rinse tanks that cannot be used as a top up for a new acid tank, shall be taken off site as special waste for treatment and disposal.

4.3 The rinsing bath shall be bunded. The bunding and maintenance of the bunds shall be in accordance with Condition 1.4.

Section 5 – Fluxing

Material is immersed in a heated (55-80°C) preflux solution in order to prevent any oxidation of the material before it is dipped. It also assists in the 'wetting' of the material during galvanizing.

Iron will precipitate to the bottom of the tank and form a sludge. This sludge is removed approximately every 12 months, by decanting the preflux solution into an empty tank and then emptying out the sludge from the bottom of the used tank. The preflux solution is then returned to the original tank and replenished with water and the preflux solution.

Every 3-5 years approximately, the full tank is replaced due to the solution becoming saturated with iron.

The preflux solution is a low fume flux solution containing zinc chloride, potassium chloride and ammonium chloride.

The potential environmental impacts from the prefluxing activity are as follows:

(a) Air – production and emissions of ammonium chloride, zinc chloride and steam.

(b) Waste – sludge taken off site for disposal.

(c) Energy – energy required to heat preflux solution – maintain temperature at 55-80°C.

(d) Accidents – spillages.

Conditions relating to Section 5

5.1 The preflux solution shall contain zinc chloride, potassium chloride and ammonium chloride at a ratio that ensure emissions are achieved (see Condition 8.1), albeit without the need for abatement equipment.

5.2 The operator shall control the iron content of the flux solution in order to minimise dross production at the dipping stage. This control will be part of the overall environmental appraisal required by conditions 10.1 and 11.1.

5.3 The decanting of the preflux solution into another container shall take place within the pre-treatment bunded area, to ensure that any spillages are contained. During the decanting process suitable cleaning materials shall be present to ensure appropriate clean up is undertaken immediately using absorbent cloths.

5.4 The fluxing bath shall be bunded. The bunding and maintenance of the bunds shall be in accordance with Condition 1.4.

Section 6 – Galvanizing

The fluxed steel material is slowly lowered into the galvanizing bath which contains molten zinc and zinc alloys at approximately 440-452°C. Fume is created instantaneously at the point of dipping, as the sublimation temperature of ammonium chloride is lower than the temperature of the zinc bath. The fume content includes ammonium chloride, zinc oxide, zinc chloride and steam. Containment of the fume occurs through use of a mobile enclosure. During dipping the enclosure is in place and the extractor fans are switched on. The enclosure will remain in place until the

galvanized product is complete. The only exception to this is when an item is double dipped due to its large size.

Ash, which is mainly zinc oxide, forms on the surface of the molten zinc and is skimmed back before the material is withdrawn from the bath – this is to avoid contamination of the galvanized coating.

The ash is removed from the bath on a regular basis, and is stored in steel containers until it is sold for further processing by the zinc chemicals industry.

Zinc dross is formed in the galvanizing bath due to iron from the work dissolving in the zinc and reacting to form dross particles that precipitate to the bottom. The dross is sold as a by-product to be recycled into zinc oxide.

The potential environmental impacts from the galvanizing activity are as follows:

(a) Air – emissions of fume, steam and possible particulate from ash handling.

(b) Waste – dross, ash produced, sold as a by product.

(c) Energy – energy required to heat galvanizing bath – reuse waste heat.

(d) Noise – extraction fans.

Conditions relating to Section 6

6.1 Emissions from the galvanizing activity shall be adequately contained by the mobile enclosure and extracted through to the 11m stack (emission point 1 on Plan Reference: Humber Plan 1). The mobile enclosure should be in place above the galvanizing bath when material is immersed, as well as when the bath is being replenished.

6.2 All doors to fume enclosures shall be closed during immersion of articles into the galvanizing bath, unless double dipping is required. In which case, the extraction system shall be operational to minimise fugitive emissions from the operation.

6.3 Ash which is collected from the galvanizing bath shall be stored in suitable metal containers until they are taken from the site for recycling and the dross is poured into moulds, set, and stored in blocks on hard surface.

6.4 The galvanizing bath shall be bunded. The bunding and maintenance of the bunds shall be in accordance with Condition 1.4.

Section 7 – Post Treatment/Passivation

The galvanized material is immersed into a water quench solution which contains a dilute proprietary passivation solution. This process retains the brightness of the material after the galvanizing process.

Over a period of time sludge develops on the bottom of the tank and is removed approximately every 12 months. The sludge is taken off site for disposal as a special waste.

Once the passivation process is complete, the galvanized material is then left in storage awaiting pick up or delivery to customers.

The potential environmental impacts from the passivation activity are as follows:

(a) Air – steam from quenching.

(b) Land – sludge to be disposed of.

(c) Water – used for quenching – lost as steam.

(d) Accidents – spillage from the passivation tank/storage of the passivation proprietary agent.

Conditions relating to Section 7

7.1 Galvanised material shall be lowered carefully into the passivation tank in order to minimise spillage and splashing.

7.2 The passivation tank shall be within a bunded area, with the bunds being of suitable construction and in accordance with Condition 1.4.

7.3 The proprietary passivation solution shall be stored in suitably lidded containers to prevent accidental spillage.

7.4 The operator shall ensure that the waste sludge taken from the passivation tank is stored in suitable lidded containers to prevent accidental spillage.

Section 8 – Emissions Control and Monitoring

The potential emissions to air have been detailed in the previous sections, which involve each of the process activities. In general they comprise:

- *acid fumes from pickling*
- *fume from galvanizing*
- *ash handling may give rise to particulate matter in the form of dust*
- *visible steam emissions may arise from pre-fluxing and post galvanizing treatments due to the temperature of the operations*

Conditions relating to Section 8

8.1 The operator shall ensure that mobile enclosures and the extraction equipment are used correctly to ensure compliance with the following emission limits.

Pollutant	Source	Limit
-Particulate matter	Galvanizing bath	15mg/m^3
-Particulate matter	Galvanizing bath	No persistent visible emission

The particulate emission limit testing shall be undertaken annually.

8.2 The operator shall ensure that fugitive emissions are kept to a minimum. In the case of the pickling activity, fugitive emissions of hydrogen chloride shall be minimised by using acid at ambient temperature and ensuring that the strength of the acid is controlled within set limits. Testing of the acid levels shall be in accordance with Condition 3.2.

8.3 The stack height shall remain at 11m. The local authority officer shall be informed if there is any alteration intended to the stack height.

8.4 Exhaust gases discharged through the stack shall have an exit velocity which ensures adequate dispersal.

8.5 Visual and olfactory assessments shall be made at least once daily at monitoring position A on Humber Plan 1. If there are incidents of persistent visible emissions, these shall be investigated immediately and rectified without delay. All results of daily monitoring, the periodic isokinetic monitoring and any resultant

incidents shall be recorded in a log book. The log book shall be kept on site and made available to the local authority officer to examine. The log book records shall be kept by the operator for at least two years.

8.6 Stacks shall not be fitted with any restriction at the final opening such as a plate, cap or cowl, with the exception of a cone which may be necessary to increase the exit velocity of the emissions.

8.7 The operator shall ensure that the galvanizing operation is undertaken in a manner as to minimise fugitive emissions. The principle source of fugitive emissions is the pickling operation, where small amounts of hydrogen chloride are released into the atmosphere as fugitive emissions. The operator shall continue to undertake the localised personal exposure testing for health and safety of personnel. Should the levels increase, remedial action shall be taken to minimise releases.

Section 9 – Emissions to surface water and sewer

All solutions used in the activity are contained within dedicated tanks or held in specific storage areas.

Each of the tanks or storage areas are in a large sump or are fully bunded to prevent spillage or leakage.

The routing of all installation drains and subsurface pipework is shown in Humber Plan 4. All the activity areas are covered with an impervious surface with a slope back to the sump to ensure that if a spillage occurred, the material will be diverted to the sump.

Conditions relating to Section 9

9.1 Inspections shall occur once a week on the condition of storage tanks, sumps and bunds, and the concreted external storage areas to ensure that the condition is satisfactory and would not allow leakage of the activity solutions to surface water or sewer.

9.2 All sumps shall be impermeable and resistant to stored materials.

9.3 All storage tanks shall be fitted with volume indicators to warn of overfilling.

9.4 All storage tanks shall have delivery connections located within a bunded area. The connections shall be fixed and locked when not in use.

9.5 Audit records on water usage shall be kept and referenced to annual production.

Section 10 – Environmental Management

The operator has an environmental management system in place. This EMS requires to be maintained and updated as required.

Conditions relating to Section 10

10.1 Humber Galvanising's Environmental Management System shall be maintained and updated regularly in order to reflect the operation of the galvanizing activity. The EMS shall include:

- preventative maintenance schedule
- an inventory of essential spares and consumables

- records of breakdowns and corrective action taken
- documented training procedures for staff which will be in accordance with competence based development modules
- induction training for contractors who may be working on the site
- procedures in place for investigating accidents/incidents with suitable corrective action procedures

Section 11 – Waste

The main waste streams have been identified within Humber Plan 3. Within this section, waste minimisation, water use, waste handling and waste reuse, recovery, recycling and disposal will be discussed.

Waste minimisation

This can be defined as 'a systematic approach by the reduction of waste at source, by understanding and changing processes and activities to prevent and reduce waste.'

Key operational features of waste minimisation will be:

- *the ongoing identification and implementation of waste prevention opportunities.*
- *Staff involvement and commitment*
- *Monitoring of materials usage and reporting against key performance measures*

Conditions relating to waste minimisation

11.1 The waste minimisation audit shall detail opportunities for waste reduction, changes in process and improved efficiency. From the audit, an action plan to optimise the use of raw materials shall be completed.

11.2 The waste minimisation audit shall be reviewed every four years.

Water Use

Rainwater from the roof of the factory is collected in an external storage tank and this water is used for process requirements. The main water usage within the activity is in the acid baths, in flux solution and as a top up for evaporative losses in post treatment operations.

Conditions relating to water use

11.3 The operator shall check water consumption on a regular basis throughout the year, and the annual consumption is compared to performance measures for the Wedge Group companies. Opportunities for reduction in water use shall be assessed and this shall form the water efficiency audit.

11.4 A water efficiency audit shall be completed at least once every 4 years. The audit shall consider the water usage and compare with usage on previous audits. Information from the audits shall be used to determine whether further reductions in water use are required.

Waste Handling

The operator has in place a waste material segregation policy in order to maximise the amount of waste for recovery, recycling and reuse.

The principle types of waste are:

- *spent acid*
- *ash and dross (by product)*

Conditions relating to waste handling

11.5 The operator shall ensure that all staff receive appropriate training to ensure they correctly use the waste by product segregation system.

11.6 Waste storage areas shall be clearly marked, with each container being labelled to categorise each waste.

11.7 The quantities of each waste to be taken off site for disposal shall be recorded, together with relevant transport documentation and detail of destination.

11.8 Particulate matter, such as ash, shall be stored in steel containers in a covered area to ensure prevention of wind whipping and resultant dust emissions, and also to keep the material dry.

11.9 Lorries transporting ash shall be sheeted immediately after loading to prevent dust escape.

11.10 A high standard of housekeeping shall be maintained around the waste storage area.

Section 12 – Energy

A program of energy review and use by the operator is essential to ensure the use of energy is minimised.

Conditions relating to Section 12

12.1 The operator shall produce a report annually on the energy consumption of the installation. The report shall include details of energy flows and target areas for reduction.

12.2 The operator shall implement procedures to reduce energy loss such as using waste heat from the galvanizing bath furnace to heat the preflux solution, use of a cover over the galvanizing bath to reduce heat loss during non-working times, and insulation of the preflux tank.

Section 13 – Accidents

In relation to the environmental permit, accidents refer to any incident which is likely to cause an environmental impact. Measures should be put in place to minimise any such impact.

Conditions relating to Section 13

13.1 The operator shall have standard operating procedures for reporting, investigating and dealing with accidents such as spillages, failure of containment, overfilling of tanks etc. The risk assessment shall detail suitable corrective action to be taken. This risk assessment shall be reviewed every two years.

13.2 Within the risk assessment, the procedures shall direct the operator to:

- investigate the accident immediately and undertake remedial action as soon as practicable
- promptly record the events and actions taken
- ensure the local authority officer is made aware, as soon as practicable.

13.3 All staff involved in dealing with accidents shall receive the necessary training to enable them to deal with such incidents.

Section 14 – Noise and Vibration

Noise and vibration from the installation shall be controlled so as not to cause nuisance to any nearby receptor.

Conditions relating to Section 14

14.1 The operator shall ensure that staff handle steel work carefully so as to minimise the noise levels from handling activities.

14.2 The operator shall provide Hull City Council with noise output details of any new plant and equipment that has the potential to increase ambient noise levels, before the equipment is installed.

Section 15 – Monitoring

This section provides conditions for the general monitoring and reporting requirements for emissions to all environmental media.

The main emission from the activity is the fume released to atmosphere through the stack, from the galvanizing bath. This emission is tested isokinetically periodically to ensure the amount of total particulate matter is within the emission limit of 15mg/m^3 (Condition 8.1). As required by Condition 8.5, these records remain on site for a minimum of two years. The following conditions are general monitoring conditions that should be complied with as part of the environmental permit.

Conditions relating to Section 15

15.1 The operator shall inform the local authority officer within 7 days of the date monitoring that will be undertaken.

15.2 The operator shall forward results of the monitoring to the local authority officer within 8 weeks of the monitoring.

15.3 Adverse results from any monitoring activity shall be investigated immediately. The operator shall ensure that:

- the cause has been identified and corrective action taken

- as much detail as possible is recorded regarding the cause and extent of the problem and the action taken to rectify the situation
- retesting to demonstrate compliance is carried out as soon as possible
- the local authority officer is kept updated.

15.4 In the case of abnormal emissions, malfunction or breakdown leading to abnormal emissions, an investigation and remedial action shall take place immediately. The activity shall be adjusted to minimise the emissions. Events and actions shall be recorded promptly and if non-compliance should occur, that could cause immediate danger to health, the operation will be suspended. The local authority officer will be notified without delay.

15.5 Particulate matter tests required by provision of Condition 8.1 shall be undertaken in accordance with BSEN 13284: Part 1 for sampling particulate matter in stacks. The samples shall be taken during the time period of maximum emissions.

15.6 The operator shall ensure that adequate facilities for sampling are provided on the stack.

15.7 The introduction of dilution air to achieve emission concentration limits is not permitted.

Section 16 - Decommissioning

16.1 The application site report – Ref. HUM B4.I GIS, which was included as part of the original application, shall be updated and revised by the operator should

circumstances change on the site that may affect the condition of the site in relation to pollution risk to the land.

16.2 Upon cessation of the permitted activity the operator shall assess the state of soil and groundwater for contamination by relevant hazardous substances used, produced or released by the installation. Where the installation has caused pollution of soil or groundwater the operator shall take the necessary measures to address the pollution.

Section 17 - General

17.1 The best available techniques shall be used to prevent, or where that is not practicable, reduce emissions from the installation in relation to any aspect of the operation of the installation which is not regulated by any other condition of this Permit.

17.2 You must respond to any Information Notice served on you for the purposes of complying with your obligation to report your pollutant releases and off-site waste transfers pursuant to the directly applicable EU duty in accordance with Article 5 of EC Regulation No 166/2006 concerning the establishment of a European Pollutant Release and Transfer Register. As a permit condition, your failure to respond in accordance with such annual E-PRTR Information Notice will hereby constitute a breach of your Permit.

Signed: ……. Date: ……
Environmental Regulation Manager

ENVIRONMENTAL PERMIT EXPLANATORY NOTE (A(2))

This note does not comprise part of the Environmental Permit but contains guidelines relevant to the Environmental Permit.

BEST AVAILABLE TECHNIQUES (BAT)

Some conditions within this Environmental Permit require that the operator use the Best Available Techniques (BAT) to achieve the requirements of the conditions and to prevent or, where this is not practicable, reduce emissions. Although the environmental permit does not give details of what would constitute BAT, it is expected that the operator will refer to any relevant guidance, available at that time, to achieve BAT.

MAINTENANCE

Effective preventive maintenance needs to be employed on all plant and equipment concerned with the control of emissions to air. Essential spares and consumables need to be available at all times.

TRAINING OF STAFF

Staff at all levels need to receive proper training and instruction in their duties relating to control of the activity and emissions, and particular emphasis given to training for start-up, shut down and abnormal conditions.

HOUSEKEEPING

A high standard of housekeeping needs to be maintained.

This environmental permit is issued under the Pollution Prevention and Control Act 1999. The responsibility under legislation for health, safety and welfare in the workplace remain in force. This environmental permit does not detract from any other statutory requirement such as any need to obtain planning permission, or Building Regulations approval.

Your attention is also drawn to the following additional matters.

REFERENCE CONDITIONS

The reference conditions for concentrations of substances in emissions to air from contained sources are:

(a) For combustion gases, dry temperature: 273K (O°C) pressure 101.3 Kpa (1 atmosphere), 11°Oxygen.

b) For non-combustion gases no correction for water vapour content, temperature:-
273(O°C) pressure 101.3 Kpa (1 atmosphere).

RINGLEMAN

Information on Ringlemann smoke charts is given in BS2742:2009.

RELEVANT SECTOR GUIDANCE

The requirements of the contents relate to the final standards as described in Sector Guidance Note SG5.

CHANGES TO THE ACTIVITY

The operator carrying on a prescribed activity under an environmental permit must notify Hull City Council in writing if he/she wishes to make a relevant change to this activity, in order that the Council may make a determination as to whether the change would be substantial or involve the breach of the current environmental permit conditions.

SURRENDER OF THE ENVIRONMENTAL PERMIT

Should the operator wish to surrender the environmental permit either wholly or partially, they must first of all make an application to Hull City Council stating that surrender is required. Before allowing such a surrender, Hull City Council will need to be satisfied that the site will be left in a reasonable state and no further pollution risk will be posed by either the site or, if it remains, any part of the installation.

TRANSFER OF THE ENVIRONMENTAL PERMIT

Should the operator wish to transfer this environmental permit to another operator, either wholly or partially, an application must first of all be made to Hull City Council stating that surrender is required. A transfer of the

environmental permit will be allowed provided Hull City Council are satisfied that the proposed new environmental permit holder can operate the activity in accordance with the conditions of the environmental permit.

CONTACTING US

This environmental permit has been issued by Hull City Council, Public Protection, Environmental Regulation Section, 33 Witham, Kingston upon Hull, HU9 1DB. Any queries should be made either in writing to this address or via the Council's Call Centre on telephone number 01482 300300.

Appeals

Anyone served with an environmental permit can appeal to the Secretary of State at the following address:

The Planning Inspectorate
Environmental Appeals Team
Room 3A Eagle Wing
Temple Quay House
2 The Square
Temple Quay
Bristol
BS1 6PN

Tel: 0303 444 5584
Email: environment.appeals@planninginspectorate.gov.uk