Permit Reference: **A12/92**
As varied by: **EPA24/96, PPC20/09, PPC02/17 & PPC03/20**

ENVIRONMENTAL PERMIT

Pollution Prevention and Control Act 1999
Environmental Permitting (England and Wales) Regulations 2016 as amended

Operator
Clark-Drain Limited
Station Road
Yaxley
Peterborough
PE7 3EQ

Registered Office
Clark-Drain Limited
Station Road
Yaxley
Peterborough
PE7 3EQ

Address of Permitted Activity
As above

Company Registration Number
01397422

Regulated Activities: **Hot dip galvanizing process**

Regulator contact details **Huntingdonshire District Council**
Pathfinder House
St Mary's Street
Huntingdon
PE29 3TN
01480 388 388

Permit Status Log:

Ref	Detail	Date	Comment
EPA24/96			
PPC20/09	*Variation*	*6th January 2010*	*Vary all conditions*
PPC02/17	*Variation*	*4th May 2017*	*Reduction in monitoring frequency*
PPC03/20	*Variation*	*26th May 2020*	*Clarification of monitoring frequency condition*

Environmental Permit

Huntingdonshire District Council (the regulator) in exercise of its powers under Regulation 13(1) of the Environmental Permitting (England and Wales) Regulations 2016 (as amended), hereby permits **Clark Drain Limited** to operate a *hot dip galvanizing* process as defined in Part 2 of Schedule 1 to the Environmental Permitting Regulations Section 2.3 Part A2(a) and as described below in accordance with the following conditions which shall apply forthwith.

Description of Activity

The installation operates a hot dip galvanizing plant which can be seen on location plan A12/92(a) Location Plan. The steel components which are galvanized are either manufactured on site or brought in from outside sources. The galvanizing bath is 8 metres long, 1.2 metres wide and 3 metres deep.

Galvanizing can be considered a step process:
Preparation: The product is inspected and wired to cranes ready to be moved to the process tanks.

Pickling: Product is pickled to remove all impurities from the product, so they do not affect the actual galvanizing process. All products are dipped into cold hydrochloric acid tanks of approximately 14% strength. The tanks are of various dimensions and the components are dipped into the most appropriately sized tank until the operator considers the component to be clean enough.

Galvanizing: The product is dipped into the galvanizing bath where it is immersed in molten zinc at approximately 450^{o}C. The galvanizing bath is the main emission to air.

Quenching: The product is then placed in a quench tank to cool to help facilitate ease of handling and inspection. The products are then weighed and transferred for dispatch.

Conditions

	Pollutant	Source	Emission limit	Type of monitoring	Frequency of monitoring
1	Particulate matter	Main stack	15mg/m^3	Manual extractive test (1)	Biennial
2	Particulate matter	Main stack	15mg/m^3	Indicative	Continuous
3	Particulate matter	Whole site	No persistent visible emissions	Operator observations	Daily
4	Pickle liquor parameters	Pickling tanks	Optimum pickling rate (2)	Standard Titration	Weekly

(1) Monitoring to determine compliance with emission limit values shall be corrected to the following standard reference conditions: temperature 273.15K (0^{o}C), pressure 101.3 kPa (1 atmosphere) and measured wet, no correction for water vapour.
(2) As described in Sector Guidance Note SG5 (06) appendix 3

5. In the case of abnormal emissions, including accidents, incidents, breakdowns and exceedances of emission limits the operator shall:
   (a) Investigate and undertake remedial action immediately
   (b) Promptly record the events and actions taken
   (c) Ensure the regulator is made aware without delay
   (d) Where there is immediate danger to human health, operation of the activity shall be suspended.

6. The operator shall notify the regulator at least 7 days before any periodic monitoring exercise.

7. The results of non-continuous emission testing described in condition 1 shall be forwarded to the regulator within 8 weeks of the completion of the sampling. All results submitted shall include details of process conditions at the time of monitoring, monitoring uncertainty, as well as any deviations from the procedural requirements of standard reference methods and the error invoked from such deviations.

8. Continuous monitors shall be fitted with audible and visual alarms, situated appropriately to warn the operator of plant failure or malfunction, the activation of alarms shall be automatically recorded, and readings shall be on display to appropriately trained operating staff.

9. All continuous monitors shall be operated, maintained, and calibrated in accordance with the appropriate standards and manufactures' instructions, which shall be made available for inspection by the regulator on a yearly basis. Instruments shall be operated to ensure less than 5% downtime over any 3-month period and all relevant maintenance and calibration shall be recorded.

10. Where available, operators shall use monitoring equipment and instruments certified to MCERTS and use a stack testing organisation accredited to MCERTS standards or such alternative requirements as approved by the regulator.

11. All sampling points and locations shall be designed to meet CEN or other sampling standards.

12. Operations shall be controlled to minimise fugitive emissions.

13. All stack heights shall be a minimum of 3 metres above roof ridge height within a distance of 5 times the uncorrected stack height and in no circumstances shall be less than 8 metres above the ground level.

14. The introduction of dilution air to achieve emission concentration limits shall not be permitted.

15. Dispersion levels shall be sufficient to provide adequate dispersion.

16. 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.

17. The following audits shall be undertaken within the timescale specified and made available to the regulator

(a)	Materials usage	Annual
(b)	Energy consumption and efficiency	Annual
(c)	Waste generation and disposal	Annual
(d)	Water efficiency	Every 4 years

18. Specific improvements resulting from the recommendations of audits shall be carried out within a timescale approved by the regulator.

19. The operator shall keep records of audits, inspections, tests, monitoring, breakdowns, and maintenance.
    (a) Current records shall be kept on site
    (b) Records shall be kept by the operator for at least four years
    (c) Records shall be made available for the regulator to examine

20. All materials including wastes shall be stored, transferred, and disposed of in an appropriate manner.

21. The operator shall ensure that all operations, including deliveries, are carried out using the highest degree of control to minimise spillages, carryover of agents, noise, leaks, and dust emissions.

22. All spillages shall be cleared up as soon as possible; solids by vacuum cleaning, wet methods, or other appropriate techniques. Dry sweeping of dusty spillages shall not be permitted in circumstances where it may result in the generation of airborne dust outside any building. Liquid spillage shall be cleaned by addition of absorbent or by run-off to contained drainage systems.

23. The operator shall ensure that all appropriate containment methods are employed and maintained to minimise energy loss, evaporation, and energy efficiency from all heated tanks.

24. Stripping shall be carried out in separate baths to pickling.

25. The operator shall control the iron content of the flux solution in order to minimise dross production at the dipping stage, which shall be recorded annually.

26. Dry fluxing shall be used including the use of a special low fume flux or a double or triple flux solution.

27. Emissions from the galvanizing process shall be adequately contained by enclosure doors and extracted to prevent fugitive emissions from the building.

28. The enclosure doors mentioned in condition 27 shall remain closed whilst work is lowered into the bath and until any fumes produced have subsided. The only exception to this is for work which requires “double-dipping”.

29. The application of an aqueous solution, specifically zinc ammonium chloride, shall be used only in order to maintain quality of work. Good operation practice shall be used to ensure emissions to atmosphere are kept to a minimum.

30. Ash shall be removed off the galvanizing bath to avoid excessive fumes being created. Sufficient containment measures shall be provided to adequately collect any fumes. All zinc ash shall be subject to zinc recovery.

31. Water from rinse tanks shall be used to make up fresh pickling baths or as top up to replace any evaporative losses from pickling tanks.

32. A rainwater harvesting unit shall be used to re-use rainwater that falls on the installation building.

33. Oil and solid interceptors shall be used for the drainage of open storage areas.

34. All interceptors and sumps shall be:
    (a) Impermeable & resistant to stored materials
    (b) Subject to regular visual inspection and, where necessary to ensure continuous function, contamination removed
    (c) Have an annual maintenance inspection; prior to inspection all contents shall be removed

35. There shall be no point source emissions of List I and List II substances to groundwater.

36. The operator shall ensure that all operational and storage areas are equipped with an impervious surface, spill containment kerbs, sealed construction joints and connected to a sealed drainage system or such alternative requirements as approved by the regulator.

37. All baths and liquid storage tanks shall be located within bunds that are designed, constructed, and located to appropriate standards and ensuring that the bund volume is more than 110% of the largest tank.

38. Storage tanks shall be fitted with high-level alarms or volume indicators to warn of over filling and where practicable the filling system shall be interlocked to the alarm system to prevent overfilling; the activation of any alarms shall be recorded. Delivery connections shall be located within a bunded area, fixed and locked when not in use. Delivery connections shall be clearly labelled.

39. An Environmental Management System shall either be adopted or devised which includes policies and procedures for environmental compliance and improvements.

40. A Preventative Maintenance Schedule shall be developed on all aspects of the installation. This shall include bulk liquid and galvanizing baths, bunds, tanks and transfers, sumps, interceptors and flues and ductwork.

41. Essential spares and consumables shall be held on site or be available at short notice from suppliers, so that plant breakdowns can be rectified rapidly.

42. The operator shall develop and maintain an Accident Management Plan. This shall include written procedures for investigating accidents, incidents and near misses, including identifying suitable corrective action and follow up. The results of these investigations shall be made available to the regulator.

43. A list of process equipment and their procedures for environmentally safe working use shall be developed and made available to the regulator.

44. Personnel at all levels, including contractors, shall be given training and instruction sufficient to fulfil their designated duties. Details of such training and instruction shall be entered into the employees' record and be made available for inspection by the regulator. Each operation post shall have its necessary training requirements readily available for inspection by the regulator.

45. The operator shall identify key plant and equipment with the potential to give rise to significant noise and take such measures as are necessary by way of mitigation and maintenance of existing plant and equipment in order to minimise noise.

46. In the event of any complaints a competent person shall be appointed to liaise with the regulator and the public with regards to complaints. The regulator shall be informed of the designated individual(s).

47. A high standard of housekeeping shall be maintained.

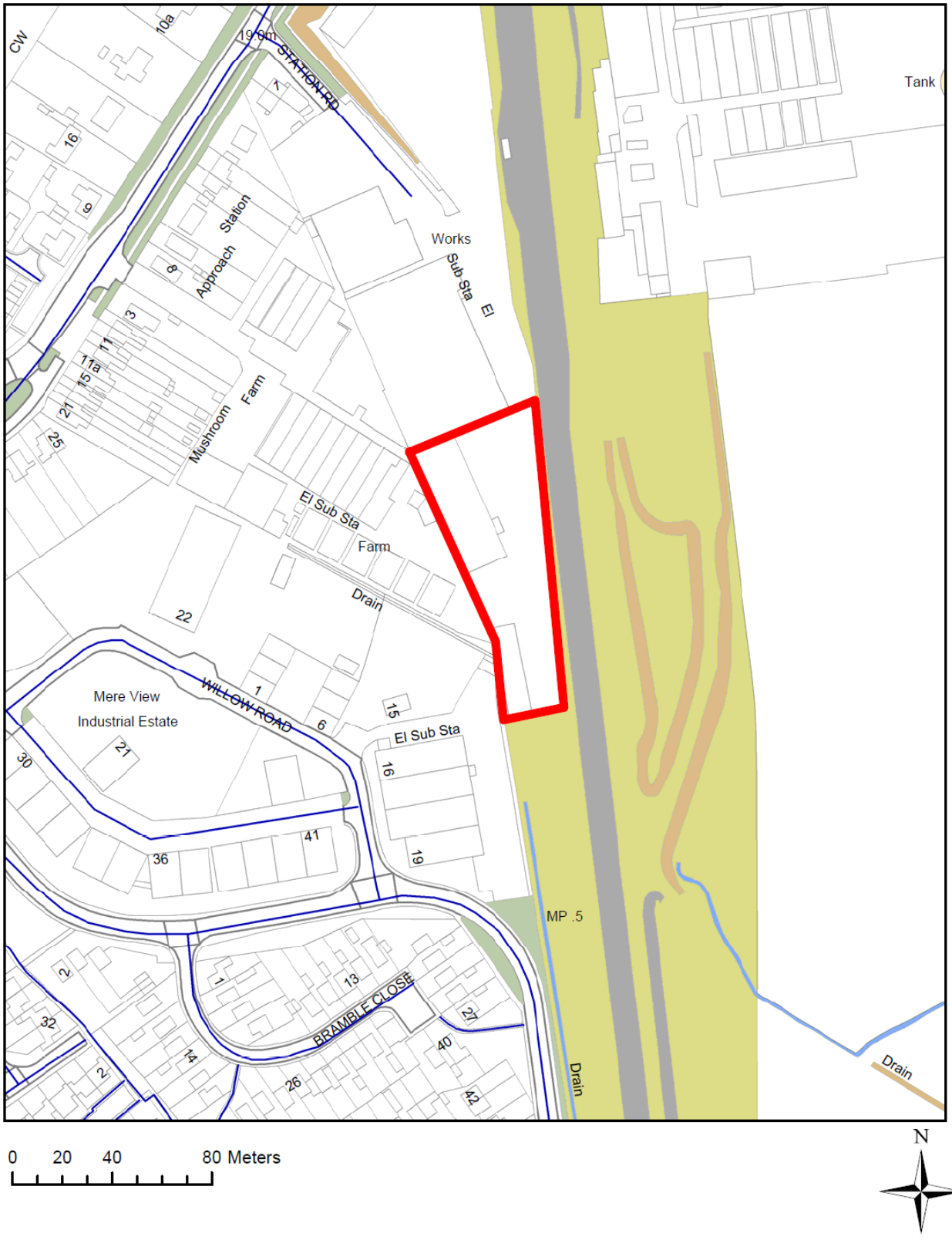
48. The best available techniques shall be used to prevent or, where that is not practicable, reduce emissions from the installation in relation to any aspect of the operation of the installation which is not regulated by any other condition of this permit.

49. If the operator proposes to make a change in operation of the installation, he must, at least 14 days before making the change, notify the regulator in writing. The notification must contain a description of the proposed change in operation. It is not necessary to make such a notification if an application to vary this permit has been made and the application contains a description of the proposed change. In this condition 'change in operation' means a change in the nature or functioning, or an extension, of the installation, which may have consequences for the environment

Signed: …….. Date: ……26 May 2020……

Environmental Protection Officer
An authorised officer of the Council

A12/92 (a) Location plan



GENERAL NOTES

1 Variation

The regulator will ensure that the permit remains up to date in line with the requirements set out in Regulation 20(1) This may involve issuing a Variation Notice following amendment to the Secretary of State's Guidance Notes or following receipt of any direction from the Secretary of State.

2 Review of Conditions

The regulator may at any time undertake a review of the conditions in this permit under Regulation 34(1). Where significant pollution is encountered or where there are changes in BAT or where the operational safety of the activity requires other techniques to be used an immediate review shall be undertaken.

3 Appeal

The permitted operator can appeal in writing to the Secretary of State against the items listed in Regulation 31.

Appeals shall be addressed to:

The Planning Inspectorate
Environment Team, Major & Specialist Casework
Room 4/04 Kite Wing
Temple Quay House
2 The Square
Temple Quay
Bristol
BS1 6PN

4 Transfer of Permit

The permitted operator who wishes to transfer the whole or part of the permit to a person who proposes to carry out the activity in the holder's place may do so in accordance with Regulation 21. Both the operator and the proposed transferee shall jointly make an application to the regulator to effect the transfer. An application shall include the permit and any fee prescribed in respect of the transfer under Regulation 19 and shall contain the operator's and the proposed transferee's contact details.

5 Notification of Proposed Change of Operation

If the operator proposes to make a change in operation of the installation, they must, at least 14 days before making the change notify the regulator in writing. The notification must contain a description of the proposed change in operation. It is not necessary to make such a notification if an application to vary this permit has been made and the application contains a description of the proposed change. Change of operation means a change in the nature of functioning, or an extension, of the installation, which may have consequences for the environment.

6 Variation of Conditions of Permits

Under Regulation 20, the operator may apply to the regulator to vary the conditions contained within the permit. Such application shall be made in accordance with Part 1 of Schedule 5 and shall be accompanied by any fee prescribed in respect of the application under Regulation 19; and paragraphs 8 of Part 1 of Schedule 5 and paragraphs 5(3) and (4) of schedule 5 shall have effect with respect to such applications.

7 Other Legal Requirements

This permit is issued solely for the purpose of the Pollution Prevention and Control Act and its associated Regulations and the operator must ensure that he complies with all other statutory requirements.

8 Annual Subsistence Charge

The Secretary of State has drawn up a charging scheme under Regulation 19. Under this scheme Local Authorities are required to levy an annual subsistence charge related to the permit. The Local Authority will invoice for the amount due which is subject to annual review by the Department of the Environment Food and Rural Affairs.