ENVIRONMENTAL PROTECTION ACT 1990, PART 1 THE ENVIRONMENTAL PROTECTION (PRESCRIBED PROCESSES AND SUBSTANCES) REGULATIONS 1991, SI 472
THE ENVIRONMENTAL PROTECTION (APPLICATIONS, APPEALS AND REGISTERS) REGULATION 1991, SI 507

APPLICATION FOR AUTHORISATION UNDER SECTION 6 OF THE ENVIRONMENTAL PROTECTION ACT 1990

1. Process for which authorisation is sought:-

Coating Process in accordance with Schedule 1, Section 6.5, Part B, of the above Act

(a) name, address and telephone number of applicant:-

> Surface Technology Plc Godiva Place Coventry England CV1 5PN Tel: 0203 258444

(b) name, number and registered office of applicant company:-

Surface Technology Plc Reg. No. 2402547

Reg. Office - Godiva Place Coventry, England, CV1 5PN

(c) address for correspondence:-

C/O Civil Engineering Dynamics Ltd 33 Louisville Road London SW17 8RL

 Name and address of premises where process is or will be carried on:-

> Surface Technology Plc Godiva Place Coventry England, CV1 5PN

4. Name of local authority in whose area the process will be operated:-

Coventry City Council



 Map enclosed with the application showing the location of the premises where the process will be carried on.

Drawing No 2409/1

- 6. List of attached documents comprising part of the application:-
 - (i) Civil Engineering Dynamics Report 2409
 (ii) Appendices bound separately (CONTAINS COMMERCIALLY CONFIDENTIAL INFORMATION)
- 7. Name of newspaper in which it is proposed to advertise the application:-

Coventry Evening Telegraph

- 8. Fee enclosed (cheques to be made payable to:-Coventry City Council) £ 900.00
- I hereby certify that all the information contained in this application is, to the best of my knowledge correct

(signature)

DR. DAVID T PENDLEBURY Managing Director Surface Technology Plc

30th September 1992

CIVIL ENGINEERING DYNAMICS REPORT 2409 APPLICATION FOR AUTHORISATION

INTRODUCTION

The site, identified in Fig. 1, has been used for coating processes since 1965. Formerly operated by Montgomery Plating, which was acquired and operated by Surface Technology plc since 1991.

One of the buildings was demolished in December 1991, and rebuilt to provide new facilities for the existing processes, which are largely similar though in many cases improved upon, with safer methods and controls.

An adjoining building, known as the GPT Building, has been acquired, in March 1992, for the purpose of providing additional facilities.

This report provides information to support an application for Authorisation of existing processes at the above site.

Parts of the information enclosed in this report are Commercially Confidential, and are identified accordingly, and appended and bound seperately to this report. Our justification for deaming such information to be commercially confidential is also provided. On this basis, such information should be withheld from the public register.

EXISTING PROCESSES

All the processes at the site are considered to be "existing processes".

The additional facilities within the GPT building, are also to be viewed as existing processes, on the grounds that procurement, and construction work was planned and occassioned prior to 1st April 1992.

THE PROCESS

GENERAL

The processes are described as "Coating Processes" in accordance with Schedule 1, Section 6.5, of the Environmental Protection (Prescribed Processes and Substances) Regulations 1991.

The aggregate of these processes qualify under Section 6.5 as a Part B process.

They do not qualify as Part A under this section by virtue of being below the threshold level for "Special Waste".

Parts of the processes ut lise Sulphuric Acid, and Nitric Acid, which would be classified as Part A, under Section 4.3 (c) and (f) as Acid processes.

Some processes, use Ammonia, which could fall under Part A, of Section 4.5 (m).

However, the processes are most aptly described as coating processes, and therefore are processes prescribed for air pollution control by the Local Authority.

There is a question of trivial quantities which is to be considered by HMIP, and there may therefore be scope for dual control.

PROCESS INTRODUCTION

Surface Technology plc, undertake coating processes which involve the following:-

ELECTROPLATING

This is a process whereby an object, usually metallic, is coated with one or more relatively thin, tightly adherent layers of some other metal, by the passage of direct current through the electrolyte.

Nickel and chromium are two metals commonly used for electroplating.

In nickel plating, after preliminary cleaning operations (degreasing), the articles to be plated are suspended in vats containing a solution of nickel sulphate with small additions, of sodium chloride and boric acid.

Proprietary agents which, for example, provide brightness and levelling, control tensile stress in deposit and reduce surface tension are also added to create the required finish.

Anodes of pure nickel are also suspended in the vats, and as the nickel is deposited they replenish the concentration of nickel, in the electrolyte.

Low voltage direct current flows from the anode via the electrolyte to the articles being plated, which act as cathodes, and nickel is deposited on them.

Chromium, as chromic acid is used for chrome plating. The chromium for plating is supplied from the chromic acid and the article to be coated is the electrode. Inert tin/lead electrodes are used as counter electrodes. Proprietary agents are added for optimum results, and a finish conforming to the customer's specification.

solution containing copper plating uses a Copper tetrapotassium pyrophosphate and pyrophosphate, additions of small quantities of brightners and surface copper cyanide plating agents. A small vat of solution is also used as a precoat.

Nickel is also used for "electroless plating", in which deposition of the nickel occurs by a controlled chemical reduction, also known as autocatalytic deposition. No electric current is passed through the solution.

Electroless nickel systems are designed to produce thin coatings on brass, copper, steel and zincated aluminium alloys.

Coatings are also applied using a dry powder coating process. This involves applying fine particle sprays to the substrate. The powder coating is electrostatically charged to facilitate a high level of transfer on to the substrate. These are then passed through stoving ovens via an overhead conveyor, for cross linking of the resins and additives etc.

SEQUENCE OF PROCESS

Fig. 2 and Drg Nos. 7400 and 7443-01A show the plant layout in the three buildings, known as OLD BUILDING, NEW EXTENSION, and GPT respectively. These are shown in a Block Plan in Fig. 3.

The process of plating at Surface Technology plc, involves the passage of the component (item/s o be plated) through various plants, depending upon the specification by the customer.

The components are "jigged" or suspended on purpose built frames (jigs) and then passed through the required plant.

Those components which require "degreasing" are processed through this plant, which removes all oils, greases, polishing media etc. from the surface of the components.

Larger components fabricated from steel are processed on the Decorative Anodic Plating plant (DAP), where they are electroplated in either Satylite (satin) nickel or duplex (two or more layer deposited separately) or single nickel, followed by chromium, in either bright or black.

Some steel components are electroplated with copper in the Auto Copper plant, followed by a single nickel layer for the purposes of EMF/RFT shielding.

Smaller steel components are processed on the "Vulcan", for duplex nickel and microcracked chromium plating. These components can be transferred after the bright nickel to the Electrophoretic Lacquer Plant (EPL) if required.

Zinc based discastings are processed through the Auto Copper and then transferred to either DAP for satylite nickel with black or bright chromium, or to the Vulcan for duplex nickel.

These are then transferred either to the EPL plant or carry on to be coated with microcracked chromium.

The EPL plant provides an electrophoretically deposited polyester modified acrylic resin, which is dyed to a gold colour. The coating is then stoved to elevated temperatures (), to enable the cross linking of the polymer to occur and give a smooth resistant finish.

All the jigs passing through the electroplating plants are transferred to the unjigging area, where the components are inspected and packed for delivery to the customer.

If inspection reveals imperfections in the coating surface, they are sent either to Nickel Strips (for nickel plated components) or Auto Chrome (for chromium plated components), where they are stripped and replated.

The empty jig is then processed through the Jig Strip to remove any deposits of copper, nickel or chromium at the contact points.

The cleaned jigs are then re-used to start the process again, with different components.

PLAN PROCESS INFORMATION

NEW EXTENSION

DEGREASING PLANT

The degreasing plant uses proprietary cleaning agents with ultrasonic agitation, producing mildly acidic water vapour as a __hazardous by-product. The air is ducted and vented to atmosphere by a stack.

Process information , schematic diagram and material safety data sheets in Appendix 1.

DAP

This plant is used for the electroplating of bright chrome, semi-bright nickel and bright nickel.

Water used for rinses and drag out containing Cr6+ (hexavalent chromium) is either discharged into effluent or treated prior to discharge.

The hazard of Cr6+ spray and sludge which is present in the vat containing chromic acid is minimised by the use of Chronomist, a spray suppressant which forms a layer of foam above the solution surface. (Reference may be made to Appendix 2, containing material data sheet on Chronomist 780, which states that "Permalite Chronomist 780 ...is completely effective in suppressing fumes and reducing drag out).

The tank solution is maintained by continuous addition, and when it is required to be changed (infrequently), is taken by outside contractor for hazardous waste.

Exhaust ventilation is carried out as a precaution and ducted to stack, where chromic acid is present in a vat.

Vats containing nickel plating solutions produce acidic water vapour as a hazardous by-product, at this air is ducted to a stack.

Water used for rinses is either discharged to effluent, or treated prior to discharge.

Where cyanide solution is used, alkaline water vapour is a hazard and this is air ducted to stack and the solutions treated prior to discharge to effluent.

Process information, schematic diagram and material safety data shouts in Appendix 2.

AUTO COPPER

This is an automatice copper plant used for copper plating of zinc based die cast components.

Vats producing alkaline water vapour and cyanide containing water are exhaust ventilated to a stack.

Water used for rinsing which is only slightly acidic or alkaline is discharged to effluent.

Solutions containing cyanide or alkaline water are treated prior to discharge.

Ammoniacal fumes may be produced in the pyrophosphate copper process vat, but the quantity is very small, and is air ducted to a stack.

Process information, schematic diagram and material safety data sheets in Appendix 3.

VULCAN

The Vulcan plant is used for duplex nickel plating, and for micro cracked chromium plating.

The components are cleaned, etched and then coated first with semi-birght nickel, followed by bright nickel.

Nickel plated components for EPL are unloaded after the bright nickel coating.

Components requiring chrome plating continue passage through the process for micro-cracked chromium plating.

Alkaline water vapour may be produced as a hazard, and is exhaust ventilated to a stack.

Nickel plating vats are maintained by continuous additions. Exhaust ventilation is provided at these baths.

Where sulphuric acid is used for activating the component surface, mist eliminator is used to minimise spray.

Haxavalent chrome spray is minimised by the use of mist eliminator, and is also exhaust ventilated to stack.

Process information, schematic diagram and material safety data sheets are in Appendix 4.

<u>EPL</u>

This is a solvent based coating plant, which uses 2-butoxyethanol in an aqueous solution.

At ambient temperatures, the low vapour pressure of 2-butoxyethanol does not present a significant hazard, when used in accordance with the manufacturer's operating instructions. It has a characteristic odour in the immediate vicinity of the vat it is used in, and there are no requirements for exhaust ventilation.

The aqueous solution containing 2-butoxyethanol is discharged to effluent, due to its very low concentration.

Process information, schematic diagram and material safety data sheets in Appendix 5.

AUTO CHROME

Imperfect chromium plated components are stripped off the chromium and replated.

Where alkaline water vapour is produced, this is exhaust ventilated to a stack, and the solution treated prior to discharge.

Alkaline water containing traces of cyanide is discharged into effluent.

There is no toxic chromic acid spray emitted by the trichrome solution, although the gassing at the cathode, may under some conditions, produce overspray that may be objectionable. For this reason, air is ducted to stack.

Additives to the trichrome solution contain inorganic halides, which may be released if the vat temperature exceeds 180 C. However, under normal working conditions of 32 C, there is not expected to be any such significant hazards.

The final stage of the process, to passivate any unplated areas of the component is non-hazardous.

Process information, schematic diagram and material safety data sheets in Appendix 6.

NICKEL STRIPS

This plant is used for the removal of nickel from electroplated steel and copper.

Hazardous alkaline water vapour is air ducted to stack, and solutions treated prior to discharge.

Process information, schematic diagram and material safety data sheets are in Appendix 7.

JIG STRIP

The jig strip is used for the removal of chromium, copper and nickel from the metal frames, (jigs) on which the components are suspended.

Alkaline spray is air ducted to stack.

Metex has replaced the use of nitric acid, and is non-lazardous, and sludge containing the metals (which are removed) is taken by outside contractor for waste disposal.

Process information, schematic diagram and material safety data sheets are in Appendix 8.

OLD BUILDING

ELECTROLESS NICKEL

In this process direct reduction of the nickel on the component's surface takes place in solution through chemical means, reducing agents providing the necessary energy.

Sodium hypophosphate is used as the reducing agent, and is stable with a wide range of proprietary formulations available.

These solutions contain many trace chemicals, designed to provide stability, control pH, maintain plating speeds and adjust deposit stress and composition.

The plating bath is in a metastable state and the immersion of a suitably active component will catalyse the reduction of the nickel onto the component surface. This freshly reduced nickel is also catalytic and so a continuous process proceeds.

The addition of PTFE (polytetraflouroethylene) makes this type of coating desirable for many applications. PTFE is added to the plating solution which enables the polymer to be co-deposited as the nickel plating proceeds.

All vats with any significant quantities of alkaline water or water containing cyanide and nickel solution are air ducted to stack.

Emissions from vats containing nitric acid are exhaust ventilated and scrubbed, prior to discharge from stack to minimise possible emissions of NOx gases.

Process information, schematic diagram and material safety data sheets are in Appendix 9.

G5 - BRIGHT NICKEL CHROME PLATING

All vats in this process sequence are air ducted to stack, with the exception of continuously flowing water rinses.

Where chromic acid is used, producing haxavalent chrome spray, mist eliminator is used to minimise emmissions of Cr6+ to the air. Exhaust ventilation is used as a precaution.

Process information, schematic diagram and material safety data sheets are in Appendix 10.

GPT BUILDING

POWDER COATING

Powder coatings, consisting of a blend of pigments, resins and additives, in the form of fine particles, are applied to a substrate via a pressurised spray application system. Electrostatic charging of the powder coating particles facilitate a high level of transfer to the substrate.

The system is automated, with the components transported through a spray zone containing a number of guns, and into a stoving oven, via an overhead conveyor.

System is designed to minimise the amount of overspray. Excess powder coating is removed by exhaust extraction, which is collected for re-use or disposal.

Extract to atmosphere is filtered to remove particulate mather. The pressure drop will be remotely monitored to identify the need for renewing filters.

Process information, schematic diagram and material safety data sheets are in Appendix 11.

PHOSPHATING

Phosphating is a process utilising "Coolphos" as a base coat, prior to the dry powder painting of die castings. This process is safer because it avoids the need to use trichloroethylene in conventional methods.

The new system is totally enclosed with no hazardous by-products expected.

Process information is provied in Appendix 11.

POLISHING

Some components, having been plated, require polishing, which can be manual or operated automatically.

Fine particles of metal and cloth including the cleaning agents are expected.

The air is however collected and ducted at source and passed through wet-back scrubbers to remove particulates.

Process information is provided in Appendix 11.

OPERATION DETAILS

The process is a continuous operation, 24hrs per day, seven days per week.

STAFF AND PROCESS SUPERVISION

See Company Quality Assurance Manual in Appendix 12, which contains details of training and staff qualifications.

Qualified staff are always on hand to oversee the processes.

PROCESS MAINTENANC

Surface Techonology employ four full-time staff who attend to the ongoing maintenance requirements. There is a procedure of planned preventative maintenence, identifying any problems and dealing with them safely, to prevent failures.

EMERGENCY PROCEDURES

FIRE

Appendix 13 contains the Code of Practice for fire procedure.

A Chemist is called out in all fire emergencies.

PROCESS BREAKDOWN

Staff are trained to deal appropriately with any process breakdown, and details can be forwarded if required.

The Company will be in discussions with City of Coventry Disaster Department to obtain their guidance if so required.

CURRENT OR ANTICIPATED AIR EMISSIONS FROM PROCESS

The process of electroplating is based upon a judicious mixture of theory, practice and experience.

The use of a variety of products in the vats produce reactions which cannot be quantified.

Thus a mass balance equation for each of the processes cannot be accurately produced, and therefore emission concentration cannot be predicted.

Whilst it would be possible to estimate worst case emissions from audited usage, this is hampered by the unknown content of various trade name components that are used.

The only accurate way of determining potential emissions from these existing processes would be by stack monitoring, of those that are likely to discharge hazardous emissions.

Many of the existing processes are undergoing improvements. It is proposed to agree a timescale for undertaking relevant monitoring with the view of assessing the emissions in the context of air quality limits proposed in the related process guidance notes. If the levels are found to be in excess of such limits, then remedial work in accordance with the definition of BATNEEC will be undertaken.

It should be noted that these are existing processes, although they are largely improvements upon those that have been in operation at the site since the 1960's.

PROPOGALS FOR MONITORING, SAMPLING, AND MEASUREMENT OF AIR EMISSIONS

Monitoring will be undertaken in those stacks where particulates and volatile organic compounds are likely to be a hazard, and also if the quantities involved qualify for such monitoring. The concentration will be determined in accordance with relevant standards, and limits assessed in terms of Process Guidance Notes: PG6/23/(92) Coating of Metal and Plastic, and PG6/3:(92) Powder Coating and Sheradising.

The timetable for implimentation of monitoring is to be agreed with the Local Authority.

Monitoring will be short term to determine emission levels, to prove conformity with Standards where necessary.

INTERIM MEASURES

A program for final upgrading if required, will be submitted to the Local Authority within 6 months of Authorisation.

The measures currently adopted, include control at source, selection of materials to minimise emissions where possible, transfer to safer less hazardous processes.

Where air emissions are likely, and to secure safety of health of the operators, air is ducted, and vented to atmosphere. Where appropriate, scrubbers and filters are used.

The chimney heights are noted on a drawing attached in Appendix 14. Adjustment to chimney heights, efflux velocity or further scrubbing, etc, will be undertaken to an agreed timescale in accordance with BATNEEC, if required.

Fugitive emissions are largely controlled by extraction at source.

Relevant process vats and machines are built on chemical resistant foundations which are fully bunded.

Good housekeeping, and industrial hygene in accordance with employees health and safety, and use of materials in accordance with suppliers safety data sheets will be complied with. Materials will be handled and stored appropriate to the manufacturers recommendations.

ASSESSMENT OF LIKELY ENVIRONMENTAL CONSEQUENCE OF ANY EMISSIONS TO AIR

A full assessment can be made when all the processes are installed and functioning at normal capacity. The stack emission levels will be measured, and assessed.

ENVIRONMENTAL PROTECTION ACT 1990, PART 1 THE ENVIRONMENTAL PROTECTION (PRESCRIBED PROCESSES AND SUBSTANCES) REGULATIONS 1991, SI 472
THE ENVIRONMENTAL PROTECTION (APPLICATIONS, APPEALS AND REGISTERS) REGULATION 1991, SI 507

APPLICATION FOR AUTHORISATION UNDER SECTION 6 OF THE ENVIRONMENTAL PROTECTION ACT 1990

1. Process for which authorisation is sought:-

Coating Process in accordance with Schedule 1, Section 6.5, Part B, of the above Act

 (a) name, address and telephone number of applicant:-

> Surface Technology Plc Godiva Place Coventry England CV1 5PN Tel: 0203 258444

(b) name, number and registered office of applicant company:-

Surface Technology Plc Reg. No. 2402547

Reg. Office - Godiva Place Coventry, England, CV1 5PN

(c) address for correspondence:-

C/O Civil Engineering Dynamics Ltd. 33 Louisville Road London SW17 8RL

Name and address of premises where process is or will be carried on:-

> Surface Technology Plc Godiva Place Coventry England, CV1 5PN

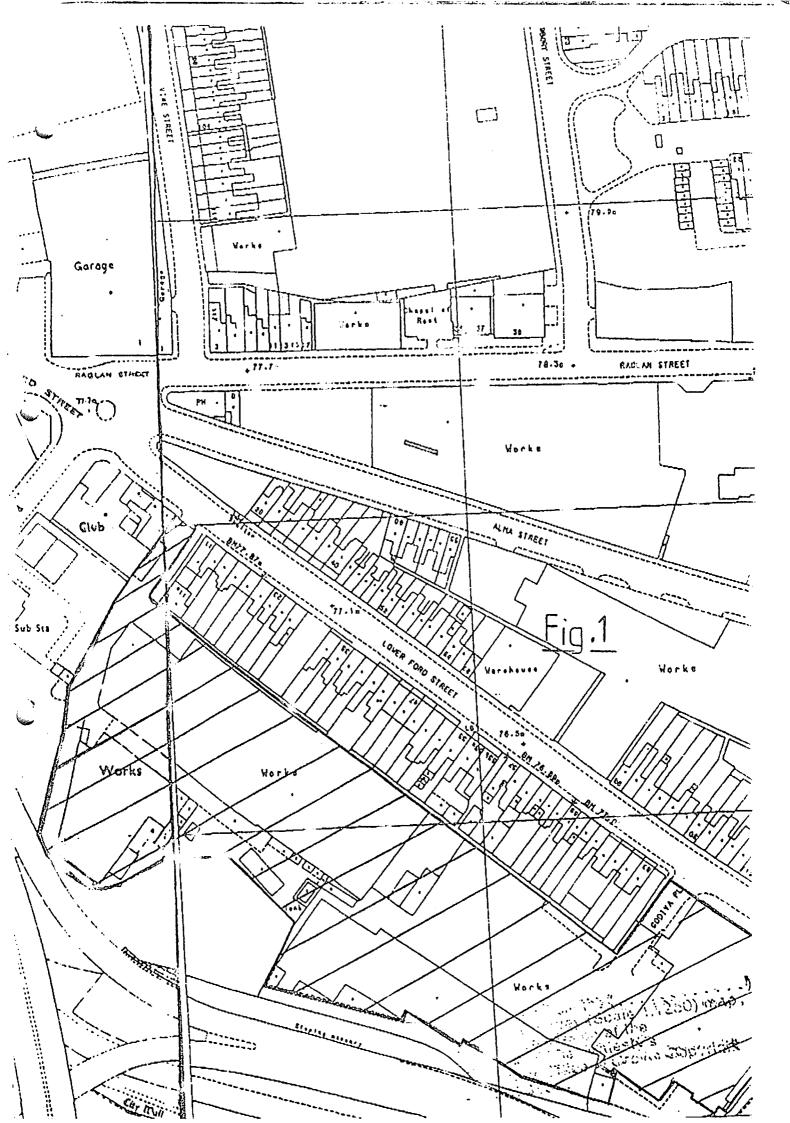
4. Name of local authority in whose area the process will be operated:-

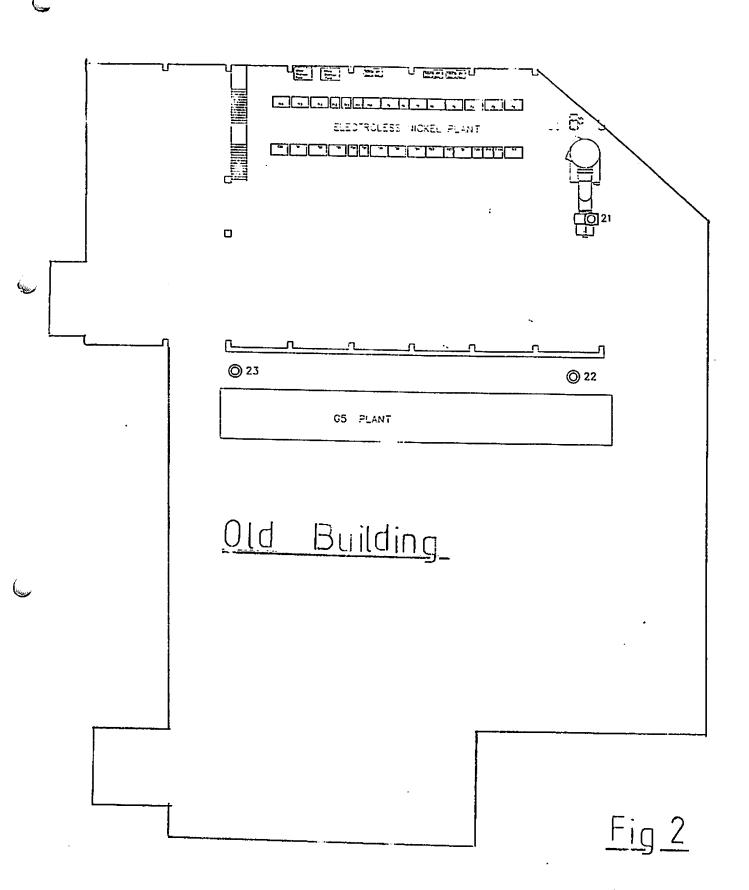
Coventry City Council

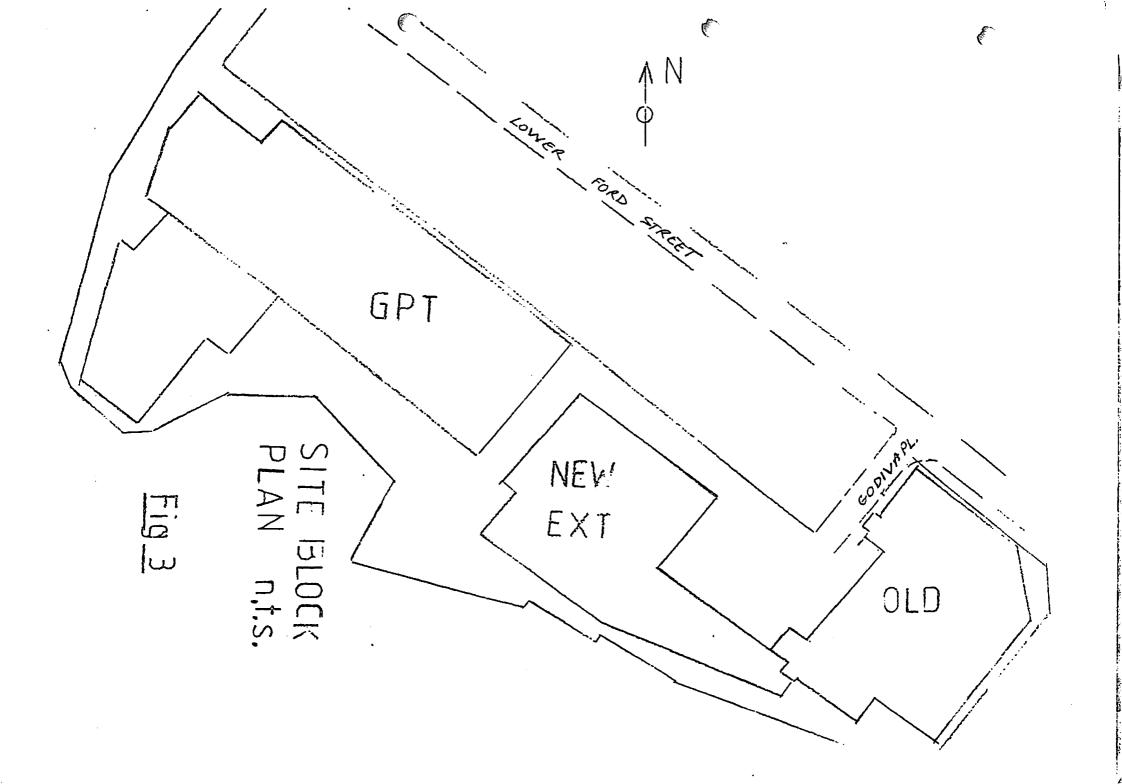


£900.00

COVENTRY 2409 / 1 Bishopsgate Green Coventry & Warwickshire Hospital Radford Howard / Ha Harnall To Coventry City F.C._ Radia! G Victoria St. * To Coventry. R.F.C. Transport Mûşeum While SI 2 Coach Hales Fairlax Bond's Hospital Sports. Centre SITE Lady Godiva olylechnic Arl Gallery Spon St. & Museum Ford's Hospital Gulson Hospital Gosford Rd Coll Toy\\ \Muşeum Council P B4101 Mag. Crown Whitefriars Union Butts Reg. Collars Queens Rd 5 Westminster Rd. Park Park To **Airport** COVENTRY Spencer R_{Oad} 圖 **SCALE** 100 200 Yards 4 Mile 100 200 300 400 Metres To University of Warwick







Reference :
Our Reference :
Please ask for :
Direct Dialling No :
Date :

City of Coventry

HOUSING AND ENVIRONMENTAL SERVICES DIRECTORATE

Director Howard T. Farrand Providing Housing, Environmental and Client Agency Services

Michael J. Green City Environment Officer Broadgate House Broadgate Coventry, CV1 1NH

Telephone: 01203 83 1832/34 Telecom Gold Mailbox: 76: END042 Fax: 01203 83 1831

THE ENVIRONMENTAL PROTECTION ACT 1990

The Environmental Protection (Prescribed Processes and Substances) Regulations 1991, SI 472.

The Environmental Protection (Application, Appeals and Registers) Regulations 1991, SI 507.

Authorisation No: 056

Application Received: 30th September 1992

Notice is hereby given that under the Environmental Protection Act 1990 Coventry City Council (hereafter called the Authority) gives authorisation to:

Surface Technology Plc Godiva Place Coventry CV1 5PN England

Registration No. 2402547

For the coating of metal and plastic products as described on Page 2 at:

Surface Technology Plc Godiva Place Coventry CV1 5PN

Subject to the conditions specified on the attached pages, Nos 1 to 6, and within the process boundary as indicated on Plan No. 1.

Signed	Dated day of	199	0:
City Environment Officer	Dated day of	time our	C
	D. oth		

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1. DESCRIPTION OF PROCESS

- 1.1 This authorisation is for the use of organic solvents for the purpose of degreasing, electrolytic coating and powder coating of metal and plastic products, as described in the Environmental Protection (Prescribed Processes and Substances) Regulations 1991, SI472, Section 6.5 Part B paragraph (a) within the process boundary outlined in red on the attached revised Plan numbered 1 and specifically relates to the processes outlined below.
 - (i) The delivery and storage of dry powder paint and trichloroethylene.
 - (ii) The cleaning and degreasing of metal products in an trichloroethylene dip tank.
 - (iii) The electrostatic coating of metal products with powder paint.
- 1.2 Any change to the above descriptions must not take place without the prior consent of this Authority.

2. EMISSION LIMITS AND CONTROLS

- 2.1 All emissions to air from discharge stacks marked A, B, C on plan numbered 1 shall be free from offensive odour outside the process boundary, as perceived by the Local Authority Inspector.
- 2.2 There shall be no emissions of particulate matter noticeable beyond the process boundary.
- 2.3 The following emission limits shall not be exceeded
 - i) Total particulate matter emissions from discharge stacks A and B on plan numbered 01 shall not exceed 10mg/m³
 - ii) Total volatile organic compound emissions from discharge stack C on plan numbered 01 shall not exceed 20mg/m³ expressed as 15 minute mean emission concentration.

3. MONITORING SAMPLING AND MEASUREMENT OF EMISSIONS

- 3.1 An olfactory assessment of emissions of volatile organic compounds from stack C on plan numbered 01 shall be carried out at least once a day along the north west boundary of the site.
- 3.1.1 Monitoring to determine compliance with the emission limits in clause 2.3 shall not take place without the prior written approval of this Local Authority.

- 3.1.2 The Local Authority shall be notified in writing at least 14 days in advance of any periodic monitoring to determine compliance with emission limits specified in clause 2.3. This notification shall include the date and time of monitoring, pollutants to be tested for and methods to be used.
- 3.1.3 Results of monitoring to determine compliance with emission limits specified in clause 2.3 shall be forwarded to this Local Authority within 08 weeks of sampling taking place.
- 3.1.4 Emissions of particulate matter from stacks A and B on plan numbered 01 shall be tested at least once per year.
- 3.1.5 Emissions of volatile organic compounds from degreasing operations shall be tested from stack C on plan numbered 01 at least once per year.
- 3.1.6 Where any periodic monitoring indicates the emissions limits specified in clause 3.2 have been exceeded the Local Authority shall be notified within 07 days of the monitoring taking place.
- 3.1.7 Where any periodic monitoring indicates the emission limits are twice those specified in clause 3.2 the Local Authority shall be notified the same day.
- 3.2 The results of monitoring to comply with clauses 3.1, 3.1.4, 3.1.5 shall be recorded in a log book. For olfactory assessments required by clause 3.1 the date, time, wind direction, name of observer, and assessment of emissions shall be recorded. For periodic monitoring required in clauses 3.1.4 and 3.1.5 the date, time and results of monitoring shall be recorded. The log book shall be returned on site for a minimum of 04 years and be made available for inspection by the Local Authority inspector.
- 3.3 Any adverse results from the monitoring required in 3.1, 3.1.4, 3.1.5 shall be followed up immediately by the investigation of the cause of the emission and any corrective action taken. Details of the situation being recorded in the log book as in 3.2.
- A detailed record shall be kept of all organic solvents used in coating processes. This shall include the quantity of solvent used for metal cleaning and degreasing. This inventory shall be forwarded to the local Authority at least once every six months and shall include a determination for the total organic solvent usage for that period.

4. MATERIALS HANDLING

- 4.1 All powder paint materials shall be stored in sealed containers to prevent fugitive particulate emissions.
- 4.2 All full, partially full and nominally empty containers which hold or have held material which contain organic solvents must be kept tightly lidded.
- 4.3 All spillages of dry powder coating materials shall be cleared using a vacuum cleaner or wet method of clearance.

5. CHIMNEYS, VENTS AND PROCESS EXHAUSTS

- 5.1 All emissions to air from discharge stacks A and B plant shall be via the fabric filter plant and cyclone systems.
- 5.2 The fabric filter plant shall be fitted with a continuous pressure drop indicator.
- 5.3 The fabric filter plant shall be inspected on a fortnightly basis and filters replaced as necessary.
- Any malfunction or breakdown of the cyclone or fabric fitter equipment likely to result in fugitive particulate emissions shall automatically result in the cessation of powder coating operations until the cause of the failure has been identified and remedied.
- 5.5 The trichloroethylene degreasing tank marked on plan numbered 01 shall be fitted with a refrigerated freeboard and lip extraction.
- 5.6 The trichloroethylene degreasing tank shall be covered whilst not in use.

6. GENERAL OPERATIONS

- Any mechanical malfunction likely to give rise to atmospheric emission or spillage of material shall be attended to and remedied as soon as possible. Any incident likely to give rise to abnormal atmospheric emissions shall be noted in detail in the process log book as described in 3.2.
- Any incidents likely to give rise to emissions which may have an impact on neighbouring residents shall be reported immediately to this Authority.
- A copy of this authorisation shall be displayed so it can be conveniently read by persons having duties which are or maybe affected by this authorisation.
- 6.4 The operator shall supply, to this Authority, on demand and without charge, a copy of all or part of the monitoring records kept in accordance with this authorisation.

epa_B_/surtech.bh

FOR INFORMATION

SUPPLEMENTARY NOTES

THESE NOTES ARE NOT PART OF THE AUTHORISATION

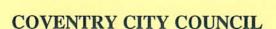
- 1. Your attention is drawn to your obligation under Section 7(2) of the Environmental Protection Act 1990 to ensure that the best available techniques, not entailing excessive cost (BATNEEC) for:
 - A) preventing the release of prescribed substances into the air or where that is not practicable by such means, for reducing the release into the air of such substances to the minimum and for rendering harmless any such substances that are so released

and

B) for rendering harmless any other substances which might cause harm if released into the air.

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ENVIRONMENTAL PROTECTION ACT 1990, SECTIONS 8(8), 12

NOTICE OF REVOCATION



To: The Company Secretary
Surface Technology Plc
Godiva Place
Coventry
CV1 5PN

Coventry City Council ("the Council"), in exercise of the powers conferred on it by section 8(8), 12 of the Environmental Protection Act ("the Act"), hereby gives you notice as follows:

1. The authorisation reference 056 is hereby revoked with effect from 13th November 1998.

Signed on behalf of Coventry City Council

City Environment Officer
The officer appointed for that purpose

Date: 21/10/98

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COVERNMENT CITY COUNCIL

NOTES OF BEVORATION

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The authorization returned 1971 is newly revoked with effect from 1341. Nevember 908.

CERTFICATE OF SERVICE BY POST (Magistrates Courts Rules 1968) Rule 55 (2)

Signed ..