

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

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

1. Process for which authorisation is sought
POLISHING OR ETCHING OF GLASS OR GLASS PRODUCTS.....
USING HYDROFLUORIC ACID.....

2. (a) name, address and telephone number of applicant* (or address
of applicant's principal place of business—for mobile plant)
STEVEN WRIGHT:trading as WESSEX CRYSTAL.....
UNIT 4 (and 6), SILVER END INDUSTRIAL ESTATE,.....
SILVER END, BRIERLEY HILL, WEST MIDLANDS DY5 3JZ.....
Telephone: 0384 481390.....

(b) name, number and registered office of applicant company* (if
applicable)
N/A.....
.....
.....

*the person/consultant who will operate the process, not eg the person/consultant who is
writing the application on the operator's behalf

(c) address for correspondence (if different from a) or b) above)
As above.....
.....
.....

3. Name and address of premises where process is or will be carried on
(not applicable to mobile processes)
UNIT 4, SILVER END INDUSTRIAL ESTATE,.....
SILVER END, BRIERLEY HILL, WEST MIDLANDS DY5 3JZ.....
.....
.....

4. Name of local authority in whose area the process will be operated
(or local authority area in which the operator has his principal place
of business—for mobile plant)
DUDLEY METROPOLITAN BOROUGH.....
.....

Wright Application Form

5. List of maps or plans enclosed with the application showing the location of the premises where the process will be carried on.

A. GENERAL MAP OF SILVER END/MEETING LANE AREA

B. LARGE SCALE PLAN OF SILVER END TRADING ESTATE,
OUTLINING UNIT 4 WHERE THE PRESCRIBED PROCESS
WILL BE CARRIED ON.

Where the process is or will be carried on on only part of the premises whose address is given at 3 above, *either* describe which part of the premises *or* list the plan(s) which identifies these parts.

..... See...5...above.....

6. List of attached documents comprising part of the application **

I. DESCRIPTION OF PRESCRIBED PROCESS

II. LIST OF PRESCRIBED SUBSTANCES

III. DESCRIPTION OF TECHNIQUES USED FOR PREVENTING
RELEASES INTO THE AIR OF PRESCRIBED SUBSTANCES, ETC

IV. DETAILS OF PROPOSED RELEASE OF SUCH SUBSTANCES INTO
THE AIR, ETC.

V. PROPOSALS FOR MONITORING ANY RELEASE OF SUCH SUBSTANCES

VI. MATTERS ON WHICH APPLICANT RELIES TO ESTABLISH THAT THE
OBJECTIVES MENTIONED IN SECTION 7(2) OF THE ACT WILL BE
ACHIEVED AND COMPLIANCE WITH SECTION 7 (4) OF THE ACT

IS ENSURED.

use continuation sheet if necessary)

**Regulation 2 of the Environmental Protection (Applications, Appeals and Registers) Regulations 1991 requires that all applications must include the following information (for guidance on these requirements see General Guidance Note No 3—"Secretary of State's Guidance: Applications and Registers", HMSO, 1991: ISBN 0 11 752425 5, £4):

—a description of the prescribed process

—a list of prescribed substances (and any other substances) which might cause harm if released into the air) which will be used in connection with, or will result from the carrying on of the prescribed process

—a description of the techniques to be used for preventing releases into the air of prescribed substances, for reducing such substances to a minimum and for rendering harmless any substances that are released

—details of any proposed release of such substances into the air and an assessment of the environmental consequences

—proposals for monitoring any release of such substances, the environmental consequences or any such release and the use of techniques for preventing etc releases

—the matters on which the applicant relies to establish that the objectives mentioned in section 7(2) of the Act will be achieved and that he will be able to comply with the condition implied by section 7(4) of the Act.

The applicant may also supply any other information he wishes the local authority to take into account in considering his application.

7. Name of newspaper in which it is proposed to advertise the application

STOURBRIDGE NEWS

8. Fee enclosed (*cheques to be made payable to* DUDLEY M.B. Council)

£ 800

I hereby certify that all the information contained in this application is, to the best of my knowledge, correct

S. Wright (signature)

STEVEN WRIGHT (name in BLOCK CAPITALS and capacity in which signing)

30 SEPTEMBER, 1991 (date)

S. WRIGHT:WESSEX CRYSTAL

I. DESCRIPTION OF THE PRESCRIBED PROCESS

The process operated by the trade is the polishing of glass products using hydrofluoric acid. The elements of the process are described and enumerated as follows:

- i) Glass products in etched or decoratively cut form are delivered to the premises.
- ii) Hydrofluoric Acid and Sulphuric Acid is delivered to the premises in plastic carboys. These substances are kept in a secure, locked storeroom, the proprietor being the sole keyholder.
- iii) Hydrofluoric and Sulphuric Acids are taken from the store under the supervision of the proprietor and are mixed in the appropriate ratios in plastic acid baths.
- iv) Glass products are washed in detergent and water, placed in plastic trays and dipped into the acid baths. The glass products are agitated manually. The trays containing the glass products are then transferred progressively into three rinsing baths and finally are washed in water and detergent, dried by cotton cloth and packed as appropriate. All employees are issued with proprietary brands of protective clothing specially designed for the handling of these substances.
- v) The plant is in use around four hours per day, five days per week.

II. LIST OF PRESCRIBED SUBSTANCES

- i) Hydrofluoric Acid
- ii) Sulphuric Acid

III. DESCRIPTION OF TECHNIQUES USED FOR PREVENTING RELEASE INTO THE AIR OF PRESCRIBED SUBSTANCES, FOR REDUCING SUCH SUBSTANCES TO A MINIMUM, AND FOR RENDERING HARMLESS ANY SUBSTANCES THAT ARE RELEASED.

- i) The acid baths and immediately surrounding area are serviced with an extractor unit vented to an enclosed sprinkler system. The water supply to the head of the sprinkler system contains the fumes and carries the emissions into an integrated plastic vat at the base of the unit.
- ii) The fluids contained in the plastic vat are periodically neutralised by the use of caustic soda to a pH level of 7 to 8. The release of this substance into the waste system is monitored periodically by the water authority. This monitoring takes place every three to four weeks, samples being taken from the water release vat.
- iii) The venting of the sprinkler system at the head of the unit is provided by a plastic chimney stack of height in excess of 25 feet.

S. WRIGHT:WESSEX CRYSTAL

IV. DETAILS OF PROPOSED RELEASE OF SUCH SUBSTANCES INTO THE AIR AND AN ASSESSMENT OF THE ENVIRONMENTAL CONSEQUENCES

- i) In view of the procedures outlined in III above it is proposed that the release of such substances into the air will be restricted to a minimum level, below that of 2.5 milligramme per cubic metre in the form of hydrogen fluoride, thereby restricting the environmental consequences.

V. PROPOSALS FOR MONITORING ANY RELEASE OF SUCH SUBSTANCES, THE ENVIRONMENTAL CONSEQUENCES OF ANY SUCH RELEASE AND THE USE OF TECHNIQUES FOR PREVENTING RELEASES

- i) The system of operation outlined in III above will prevent the release of emissions other than through the sprinkler system described. It is proposed that the emission from the chimney stack be monitored at intervals as recommended by the authority.
- ii) The efflux velocity of the system is negligible, as no power source exists within the system which is designed to process only fumes and vapours arising from the substances.

VI. MATTERS ON WHICH THE APPLICANT RELIES TO ESTABLISH THAT THE OBJECTIVES MENTIONED IN SECTION 7(2) OF THE ENVIRONMENTAL PROTECTION ACT, 1990 WILL BE ACHIEVED AND THAT HE WILL BE ABLE TO COMPLY WITH THE CONDITION IMPLIED BY SECTION 7(4) OF THE ACT

- i) It is considered by the applicant that the systems in operation at the plant represent best available techniques not entailing excessive costs. Also the monitoring procedures will cover the event of plant failure within an acceptable period of time.

ADDITIONAL INFORMATION

WESSEX CRYSTAL LIMITED

- 1) List of Prescribed Substances known to be emitted from our polishing process are as follows:-

- 1) Hydrogen Fluoride
- 2) Particulate matter

Non-Prescribed substances emitted would only include water vapour as far as I am aware.

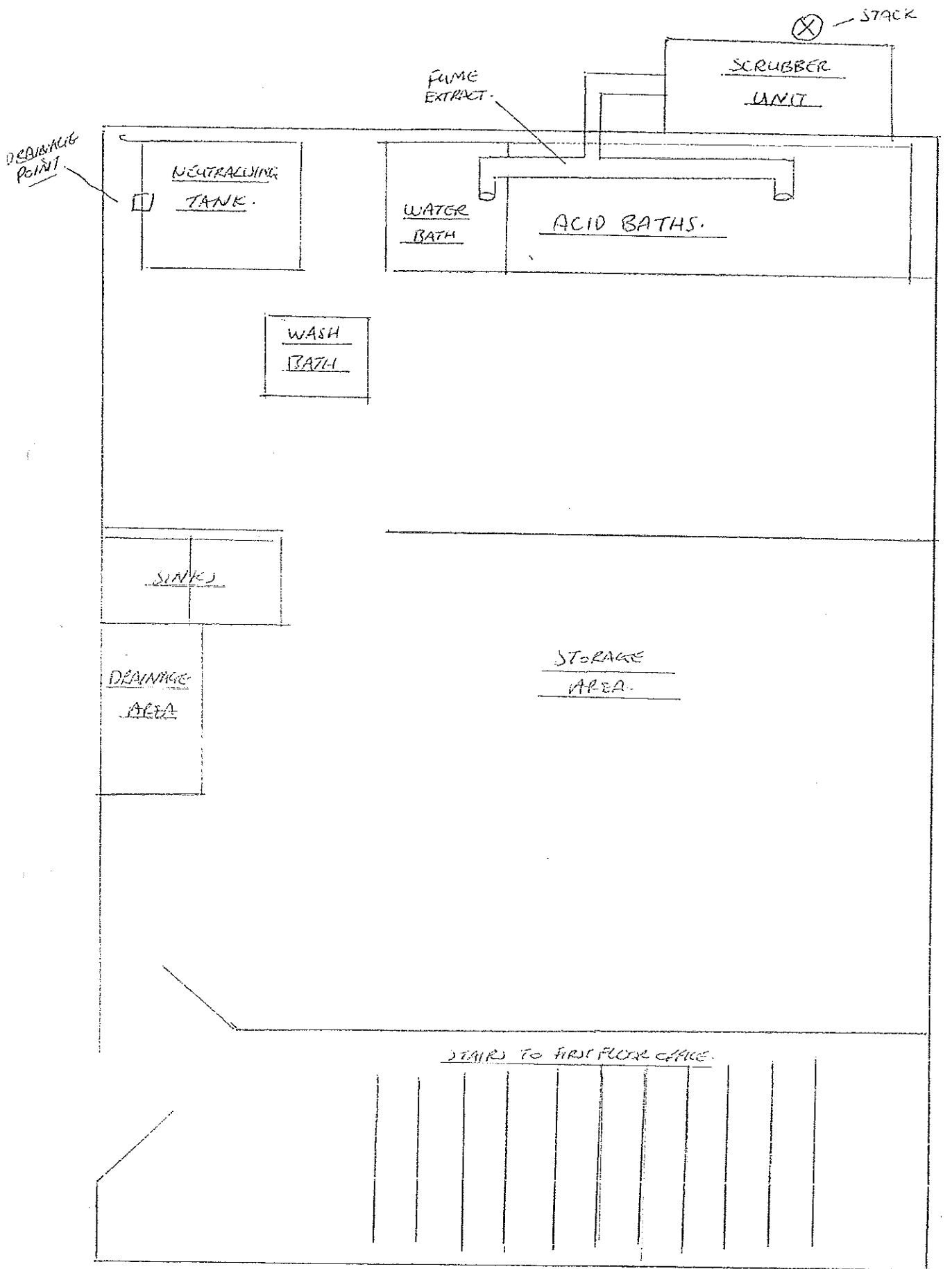
- 2) We use approximately six carboys of Hydrofluoric Acid and ten carboys of Sulphuric Acid per week, and the mix of acid for polishing purposes is roughly one part hydrofluoric to 2 parts sulphuric.
- 3) Maintenance of all equipment is carried out by the proprietor, Mr.J.Wright. The motor to the scrubbing unit has recently been changed as part of our ongoing maintenance programme.

We drain all of the water from the scrubber unit every two days into the neutralising tank in the polishing unit and using caustic soda we bring the acidic water to a PH. of approximately PH. 7 or 8. We then pump clean water back into the scrubbing unit. The PH of the water is tested with litmus paper we intend to purchase a PH meter for this purpose in the near future.

- 4) The acid polishing is carried out by the proprietor of the business Mr.J.Wright, who is very experienced lead crystal glass polisher. If any new staff were employed to acid polish, they would be trained and supervised by Mr.Wright.
- 5) Cutting of the lead crystal glass blanks is carried out in the cutting shop which adjoins the polishing shop. These are four cutting lathes which used diamond cutting wheels. The wheels are maintained wet during cutting and so all particulates cut from the product are collected as slurry in a water bosch below the cutting wheel. The collected solids are occasionally dug out and removed for disposal in a waste skip.

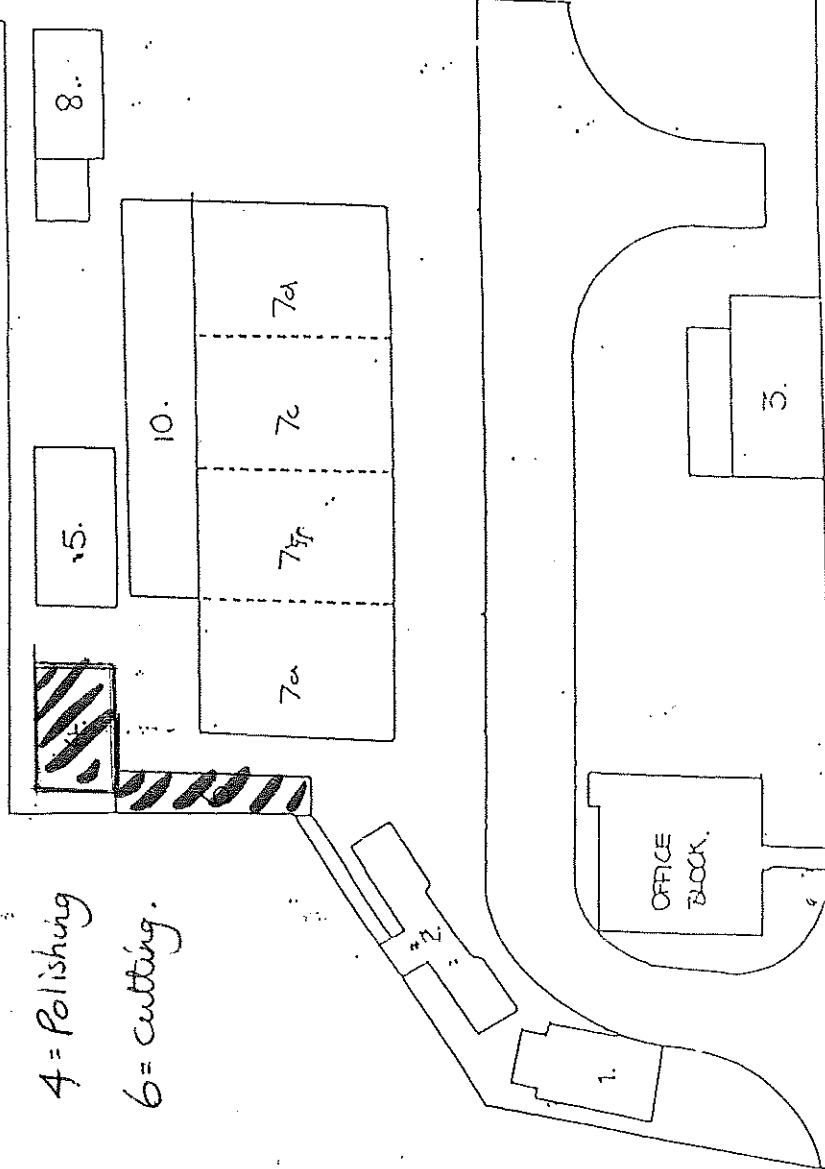
I do not think that there are any significant fugitive emissions to air from the lead crystal glass cutting process.

Wessex Crystal - Acid Polishing Unit.

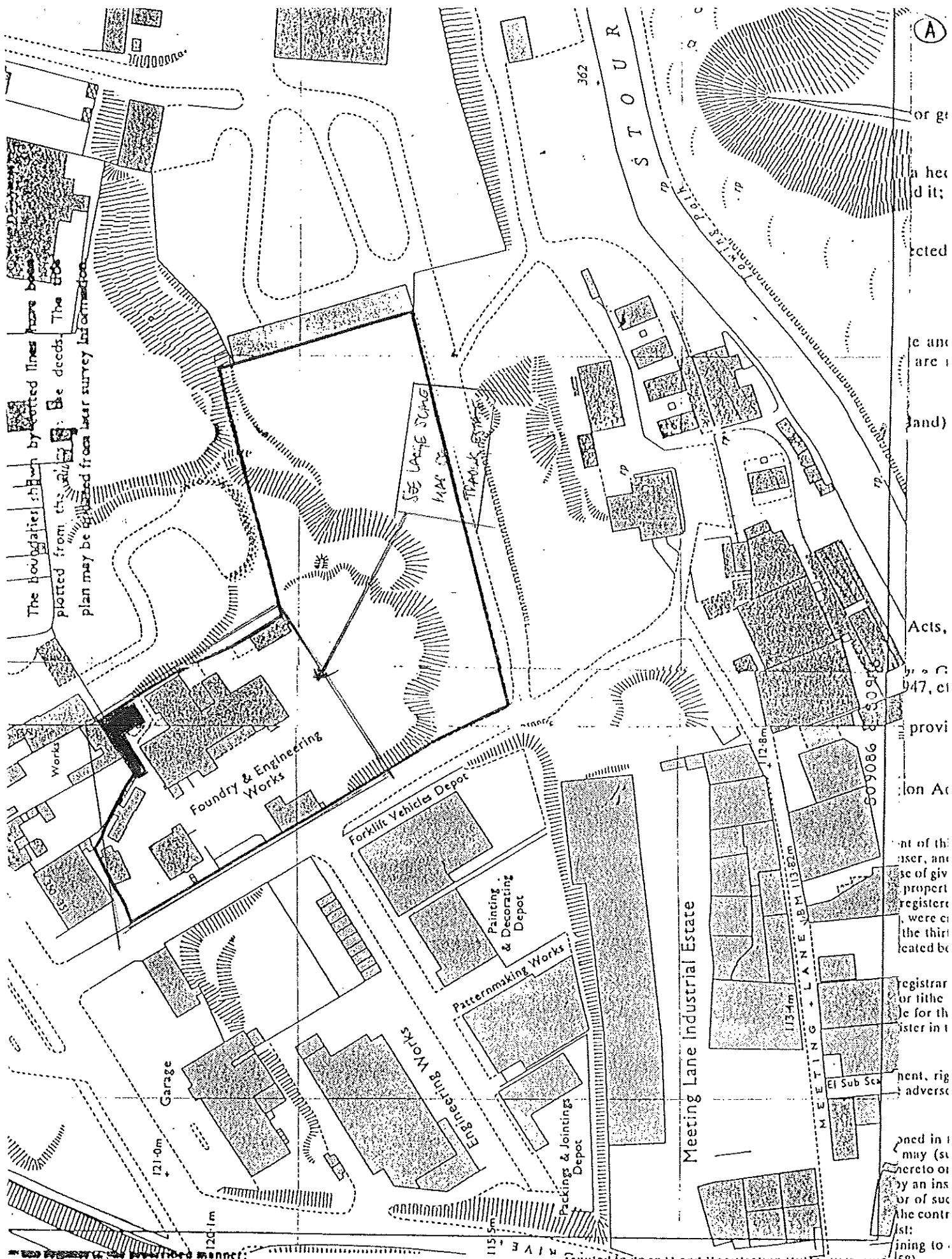


...MBC LTD. 2005/10/10/10

SILVEREND TRADING ESTATE.



4 = Polishing
6 = cutting.



in the following manner:

- 1) Rights of fishing and sporting, viciniorial and manorial rights of all descriptions (with exception), and franchises;
- 2) for any term or interest not exceeding twenty-one years, granted at without taking a fine;

reputed to do so (Land Registration Rules, 1925, rule 258).

- (2) All rights and title conferred on the National Coal Board (Coal Industry Nationalisation Act, 1946, section 5).

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Area Director: P WARD

Chief Environmental Health Officer
Dudley Metropolitan Borough Council
4 Ednam Road
DUDLEY
West Midlands DY1 1HW

Your Ref: TG/BKP/1214

Our Ref: EP/10/04/51/91

6 NOV 1991

Dear Sir

**ENVIRONMENTAL PROTECTION ACT 1990 PART 1:
AUTHORISATION FOR GLASS POLISHING PROCESS**

Thank you for consulting the Health and Safety Executive about the above application submitted by Wessex Crystal, Units 4 & 5, Silver End Industrial Est, Brettell Lane, DY5 3JZ.

The firm is within HSE's enforcement responsibility under the Health and Safety at Work etc Act 1974 and details of the application are noted for our records.

The Glass Polishing process involves the use of, or may give rise to, substances likely to be subject to the Control of Substances Hazardous to Health Regulations 1988 (COSHH) and the Control of Lead at Work Regulations 1980. Occupational exposure limits for a range of substances have been assigned under COSHH. Details of these standards are given in Guidance Note EH40/91, published by HMSO.

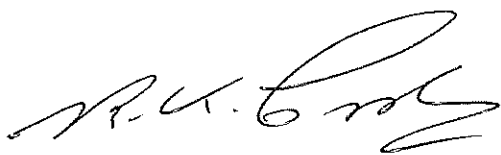
Authorisation conditions and any monitoring regimes to be required under the Environmental Protection Act should not contain requirements which could adversely affect the arrangements necessary to protect health and safety in the workplace.

The application for authorisation has not been assessed in detail but, if in your consideration of the application you identify any areas of potential confusion or conflict with health and safety at work issues, I would be pleased to discuss specific matters with you.

I suggest that the following text may be a useful reminder to the applicant and could be included in any covering letter sent with the authorisation. "This authorisation is given in relation to the requirements of Part 1 of the Environmental Protection Act 1990. It must not be taken to replace any responsibilities you may have under workplace health and safety legislation".

When the authorisation is issued I would be glad to have a copy.

Yours faithfully

A handwritten signature in black ink, appearing to read 'R. K. Cook', with a stylized flourish at the end.

R K COOK
HM Principal Inspector of Factories

cc: HM Inspectorate of Pollution,
McLaren Building,
2 Masshouse Circus
Queensway,
Birmingham B4 7NP