

COVENTRY CITY COUNCIL

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

NOTICE OF REVOCATION

92

To: *Midland Lewis Ltd*
Lythalls Lane
Coventry
CV6 6FY

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 092 is hereby revoked with effect from 7th April 1997.

Signed on behalf of Coventry City Council


.....
City Environment Officer
The officer appointed for that purpose

Date: *17th March 1997.*

n06031gec

Your reference :
Our reference : EH/EP/GEC
Please ask for : G E Clamp
Direct Dialling No: 01203 831883
Date : 12th August 1996



Midland Lewis Limited
Units 4 & 5
Binns Close
COVENTRY
CV4 9TB

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 : ENDO42
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: 092
Application Received: 28th March 1996

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

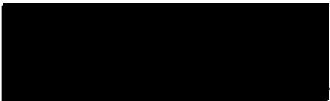
Midland Lewis Limited
Units 4 & 5
Binns Close
COVENTRY
CV4 9TB

Register in England No: 3130606

For the manufacture and chemical treatment of timber and wood based products as
described on Page 2 at:

238 Foleshill Road
COVENTRY
CV1 4MW

Subject to the conditions specified on the attached pages, Nos 1 to 3, and within the
process boundary as indicated on Plan No. 1.

Signed  Dated *9th* day of *August* 199*6*
City Environment Officer

CERTIFICATE OF SERVICE BY HAND

I, [REDACTED]..... being employed
as a *Case Protection Officer* in the Housing and
Environmental Services Directorate of
Coventry City Council hereby certify that the
Notice of which this is a true copy was
served/delivered by me to *Midland Law Ltd*
of *238 Foleshill Road*....., Coventry,
on *12th August*.. 19*96*.....

Signed [REDACTED]

1. DESCRIPTION OF PROCESS

- 1.1 This authorisation is for the manufacture and chemical treatment of timber and wood based products, as described under Schedule 1, Section 6.7 of the Environmental Protection (Prescribed Processes and Substances) Regulations 1991, SI472, within the process boundary outlined in red on the attached plan numbered 1 and relates to the process outlined below.
- 1.2 The re-sawing and milling of soft woods and hardwoods and the re-cutting of plywoods, particle boards and medium density fibreboards using panel saws, cross cut saws, band saws and four sided planers and planer/thickeners all with local extract ventilation to the Ro-Ro collection skip via the cyclones marked C1, C2 and C3 on the attached plan numbered 1.
- 1.3 The pre-treatment of timber via the Protim Solignum vacuum/low pressure installation marked A on the attached plan numbered 1, using Protim 800 preservative.
- 1.4 Change to the above process must not take place without the prior consent of the Local Authority.

2. EMISSION LIMITS AND CONTROLS

- 2.1 All emissions to air from the Protim Solignum installation, marked A on the attached plan numbered 1, shall be free from offensive odour outside the process boundary as perceived by the Local Authority Inspector and shall be free from droplets.
- 2.2 All emissions to air from treated timber shall be free from offensive odour beyond the process boundary as perceived by the Local Authority Inspector.
- 2.3 Any adverse results from the monitoring required in clause 2.1 above, shall be investigated immediately to establish the cause and corrective action instigated. Details of such events shall be recorded in the log book.

3. MONITORING, SAMPLING AND MEASUREMENT OF EMISSIONS

- 3.1 A visual assessment of wood dust emissions from the extraction system shall be carried out, from positions marked X, Y and Z on the attached plan numbered 1, at least once a day whilst the extractor system is in operation.
- 3.2 An olfactory assessment of emissions from the Protim Solignum installation shall be carried out at least once a day from the position marked X on the attached plan numbered 1 whilst the installation is in use.
- 3.3 The result of all monitoring to comply with clauses 3.1 and 3.2 above shall be recorded in a log book which shall include details of date, time, wind strength and direction, weather conditions, the name of the observer and an assessment of emissions. The log book shall be retained on site for a minimum of two years from the last entry and shall be made available for examination by the Local Authority Inspector on request.
- 3.4 Any adverse results from the monitoring required in clauses 3.1 and 3.2 above shall be investigated immediately, to establish the cause and corrective action instigated. Details of such events shall be recorded in the log book.

4. MATERIALS HANDLING

- 4.1 Arisings of wood waste shall be stored in designated containers.
- 4.2 Arisings of wood dust shall be stored in the Ro-Ro skip marked D on the attached plan numbered 1.
- 4.3 Arisings of wood dust shall only be transported to the Ro-Ro skip via the local extract ventilation system.
- 4.4 The Ro-Ro skip shall be fitted with a high-level window to enable a visual assessment of remaining holding capacity to be made and to prevent over filling.
- 4.5 Protim 800 preservative shall only be stored in the bulk storage tanks within the Protim Soligum installation.
- 4.6 The Protim Soligum installation shall be contained within a bund with a minimum holding capacity of 110% of the capacity of the bulk storage tanks. The bund shall be maintained to ensure its integrity.
- 4.7 The Protim Soligum treatment vessel shall be fitted with a device to prevent the entry door being opened until the vessel is drained.

5. VENTS AND PROCESS EXHAUSTS PROCESS

- 5.1 The vent from the Protim Soligum installation shall not be fitted with any restriction at the final opening such as a plate, cap or coil.

6. GENERAL OPERATIONS

- 6.1 The protim Soligum plant shall be inspected at a frequency of at least once every twelve months, to ensure its correct function to comply with the conditions of this Authorisation.
- 6.2 Any mechanical malfunction, spillage of material or other incidents which is likely to give rise to emissions to atmosphere shall be attended to and remedied as soon as possible. Any such incident shall be recorded in the log book described in clause 3.3 above.
- 6.3 All plant and equipment concerned with control of emissions to atmosphere shall be monitored in good working order to ensure compliance with the conditions of this Authorisation.
- 6.4 A copy of this Authorisation shall be available to all persons having duties or responsibilities which are or maybe affected by this Authorisation.

7. UPGRADING OF THE PROCESS

- 7.1 No later than six months from the date of this Authorisation a programme for upgrading the process shall be submitted to this Authority. The upgrading programme shall have regard to the Secretary of States Guidance : manufacture of Timber and Wood Based Products, PG6/2 (95), and Chemical Treatment of Timber and Wood Based Products, PG6/3 (91).

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.
2. The authority for contact purposes should be taken to mean the head of the Environmental Protection Section, Tel 831810 during office hours, 832222 outside office hours.

Midland – Lewis Limited

Timber Merchants, Staircase & Joinery Manufacturers

Units 4 & 5, Binns Close, Coventry CV4 9TB.

Telephone: (01203) 464770 & 226571 Fax: (01203) 468347

ENVIRONMENTAL PROTECTION ACT

APPLICATION FOR AUTHORISATION OF AN EXISTING PART B PROCESS

Introduction

Midland-Lewis Limited is a privately owned timber Importer and Joinery Manufacturer operating currently from the sites in Coventry, Binns Close, Parkstone Road and the site to which this application refers, 238 Foleshill Road, Coventry.

It should be noted that by the end of 1996 the company plans to relocate to larger premises in Coventry for which contracts have been exchanged, thus closing down its three existing sites and accommodating its entire operation on one major site. This application is therefore of a temporary status and will, by the end of 1996, be subject to substantial change.

The company's operation at this application site situated at 238 Foleshill Road, Coventry consists of six components:-

- a) Incoming timber and sheet materials (imports).
- b) Storage of timber and sheet materials
- c) Handling of timber and sheet materials not requiring further processing.
- d) Timber requiring resawing and/or milling.
- e) Timber requiring pre-treatment with preservative.
- f) Delivery of timber and sheet materials to customers.

The elements for which Part B Authorisation is required, d) and e), are further described on the data packages and plans accompanying this application.

No actual throughput data is available to quantify total volumes of timber processed per annum, however, for the purpose of this application, it can be assumed that volumes in excess of 1000 m³ will be processed.

Midland – Lewis Limited

ENVIRONMENTAL PROTECTION ACT

APPLICATION FOR AUTHORISATION OF AN EXISTING PART B

Data Package Contents:-

Appendix 'A' to include

- Introduction to Processing Description
- Description of Milling Operations

Appendix 'B' to include

- Emissions to Air Control/LEV
- Upgrading Programme

Appendix 'C' to include

- Compliance Procedures
- Training Records
-

Appendix 'D' to include

- Mill Location/Site Plans
- Personnel/Responsibilities

APPENDIX A

The milling in question is the resawing and milling of softwood and hardwood timber of both imported and home grown origin. The process also includes the recutting of plywoods, particle boards and Medium Density Fibreboards.

Timber is also stored prior to processing in both open and covered storage areas depending on quality/grade and end usage. Plywoods and sheet materials are stored in covered storage areas. Timber and sheet materials are transported within the process site by mechanical methods ie Sideloaders and counterbalance Lift Trucks.

Timber or plywoods are transferred from storage to mill areas (A & B on Mill Plan) by fork-lift truck for processing.

Machinery used in the operations of resawing, milling and sheet material cutting is as shown on the Mill Plan.

After processing, timber that has been resawn is moved to either the timber treatment area for further process or moved directly to a 'Finished Jobs' area prior to loading onto transport for onward to delivery to customers.

APPENDIX 'B'

All machinery used in the described process is connected to Local Exhaust Ventilation (LEV) as indicated on the Mill Plan.

The LEV System from 'B' on the Mill Plan is approximately 12 years old and has been periodically upgraded in recent years. The machinery connected to this part of the LEV System are as listed on the plan 1-5.

1. Holzer Panel Saw
2. Wadkin Bursgreen Planer/Thicknesser
3. Robinson Cross-cut Saw
4. Wadkin Cross-cut Saw
5. Robinson 36" Band Resaw

Extraction LEV to these machines is provided through a cyclone (C1) situated on the roof of a blockbuilt chip/dust store where dust is collected through a collecting funnel and is transferred through a transfer fan to a further cyclone (C2). There are four spare LEV connections in Mill 'B'. These remain from locations of machinery which have been removed and transferred to either new location at our factory or disposal. There is also a further cyclone (C4) and a Bench Rip Saw which are no longer in use and as such are not part of this application. There is a certain amount of fugitive emission of wood dust from machinery and this is controlled by general housekeeping on a regular basis by sweeping of waste into sweep up points or into sawdust collection pits where the waste passes through the LEV system and into the Ro-Ro collection skip.

The LEV System from Mills 'A' and Annexe 'C' on the Mill Plan is a recent installation less than 12 months old. The machinery connected to this part of the LEV System are as listed on the plan 6, 7 & 8.

6. Robinson 4 Side Planer
7. Robinson 48" Band Resaw
8. Robinson 48" Band Resaw

Extraction (LEV) to these machines is provided through cyclones C2 & C3 situated near Mill 'A' where dust/woodshavings are collected through a twin funnel receiving point where emissions pass through a further transfer fan system and into the Ro-Ro collection skip (11). There are two spare LEV connections in Mill 'A'. These remain from locations of machinery which has been removed and transferred to either new location at our factory or disposal. There is a certain amount of fugitive emission from machinery and this is controlled by general housekeeping by sweeping of waste into either sweep up points or into sawdust collection pits where the waste passes through the LEV System and into the Ro-Ro collection skip (11).

The Ro-Ro container is supplied and maintained by Arden Woodshavings Ltd who are a licensed waste disposal contractor. Maintenance to the LEV System is provided 'in-house' by a skilled team of maintenance engineers and electricians.

Midland – Lewis Limited

As stated in the introduction to these appendices to this application the company does not expect the operational life of this site to last beyond 1996. Any programme of upgrading to the LEV System will therefore be limited to situations arising from wear and tear which will be dealt with by ongoing general maintenance or as a result of recommendations or requirements made by the local authority inspectorate. Major upgrading work will be undertaken when the company relocates to new premises in the latter part of 1996.

APPENDIX 'C'

Compliance Procedures

To demonstrate compliance with possible authorisation conditions relating to:-

- i. Process Parameters
 - ii. Performance of pollution abatement plant
 - iii. Quality Assurance plans
 - iv. Record Keeping
- the following systems are in place (i), (iii) and (iv)

The effective control of process parameters and record keeping is covered by the companies ongoing objective of the operation and maintenance of Registration and compliance to the requirements of ISO 9002 to which we were accredited in 1994. Continual regular audits are carried out by our own quality auditors and by auditors of our accreditation body TRADA.

(ii) Not applicable - See Appendix 'B'

In-house maintenance team will carry out periodic Safety and Environmental Audits of the LEV plant approximately twice a year. Records of these audits will be kept in the form of maintenance records.

Training records of all personnel are kept in the company's personnel file held at Binns Close, Coventry.

APPENDIX 'D'

The application site at 238 Foleshill Road, Coventry is under the daily control of its manager Mr Paul Buckley who is responsible to the company's Joint Managing Director, Mr W H Smith. The daily operation of the application process is the responsibility of Mr Harry Bragginton who is the Yard/Mill Supervisor.

It is the overall responsibility of the Joint Managing Directors through Mr Paul Buckley that compliance with the requirements of the Environmental Protection Act is maintained at the application site.

It is the responsibility of the manager to notify to the local authority any change to the process operation which may affect compliance with the Environmental Protection Act.



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

1. Either Name and address of applicant*

.....
.....
.....

Or Name, number and registered office of applicant company* (if applicable)

MICHAEL LEWIS LIMITED
UNITS 4+5, BINNS CLOSE,
COVENTRY CV4 9TB

* the person/company who will operate the process, not for example the person/consultant who is writing the application on the operator's behalf.

2. Name and address of premises where process is or will be carried on (not applicable to mobile processes).

238, FOLESHILL ROAD,
COVENTRY.
CV1 4HW

3. Address for correspondence if different from 1.

.....
.....
.....

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

.....
.....
.....

Where the process is or will be carried on, only part of the premises whose address is given at 2 above, either describe which part of the premises or list the plan(s) which identifies these parts.

.....
.....
.....

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

- GENERAL SITE LAYOUT PLAN
 - SITE LOCATION MAP
 - MILL PLAN
 - TIMBER TREATMENT AREA
 - INTRODUCTION + APPENDICES A-D
 - INFORMATION REGARDING TIMBER TREATMENT PROCESS
 - TRAINING RECORDS (H. BRADGINTON, M. O'BRIEN) TIMBER TREATMENT
 - SITE SAFETY AUDIT REPORT (PROTH TREATMENT)
- (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: Application and Registers", HMSO 1991):

Description of the prescribed process.

List of prescribed substances (and any other substances which might cause harm if released into the air) used in connection with or resulting from the prescribed process.

Description of the techniques to be used for preventing releases into the air of such substances for reducing such substances to a minimum and for rendering harmless any such substances that are released.

Details of any proposed release of such a substance into the air and an assessment of the environmental consequences.

Proposals for monitoring any release of such substances, the environmental consequences of any such release and the use of techniques for prevent or control releases.

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

The applicant may also supply any other information they wish the Local Authority to take into account in considering the application.

Fee enclosed (Cheque to be made payable to Coventry City Council)

£990.00 (correct to March 1996)

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

Signature  Date 27/3/96

Status of Signatory above J. M. D.

ENVIRONMENTAL PROTECTION ACT

APPLICATION FOR AUTHORISATION of an existing Part B Timber Treatment Process (Data to go with completed application form)

Data package content

Appendix A, to include

- **Introductory Process Description**
- **Preservative Formulation Detail**
- **Plant Operation : Summary / Cycles**
- **Process Description Flow Diagram**

Appendix B, to include

- **Emissions to Air / Control and Use of BATNEEC**
- **Upgrading Programme**

Appendix C, to include

- **Compliance Procedures**
- **Plant Operators Training Records**

Appendix D, to include

- **Plant Location / Site Plan**
- **Personnel / Responsibilities**

**B : Existing
Issue 2 - June.95**

APPENDIX A

DESCRIPTION OF PRESCRIBED PROCESS

The process in question is the industrial pretreatment of timber with preservative, to prevent rot and / or insect attack in service. The treatment process involves the use of vacuum / low pressure impregnation with the preservative fluid in plant manufactured and supplied by Protim Solignum Ltd. Treatment is carried out in accordance with either BS 5258 Part 5, BS 5589 and / or British Wood Preserving and Damp-proofing Association (BWPDA) Standards. The preservative used is manufactured in accordance with BS 5707 Part 1 and / or BWPDA Standards.

This application relates to one treatment plant, which is an existing installation.

The plant comprises three basic elements :

- | | | |
|-----|------------------------------|--|
| (a) | Treatment Vessel- | In which timber is processed. |
| (b) | Operational Storage Vessel - | Working tank for preservative fluid. |
| (c) | Bulk Storage Vessel - | Top up tank for OSV as preservative is used. |

Current plant are manufactured by Protim Solignum in accordance with the BWPDA Code of Practice for the Safe Design and Operation of Timber Treatment Plant (1991) .

The plant is to be upgraded over an agreed period to meet the design and operational requirements of Secretary of State's Guidance Note PG6/3 (1991, inc. 1994 amendments), "Chemical treatment of timber and wood based products". See Appendix B for detail of the proposed upgrading programme.

The process is not mobile. There will usually be at least two operators on site, both trained by Protim Solignum in accordance with the HSC document "Recommendations for training users of non-agricultural pesticides". Copies of the Plant Operators' training records are included in Appendix C. The process is subjected to an environmental and safety audit by Protim Solignum on a regular basis.

An extract from the Plant Operators Manual is enclosed giving a summary of the process variables, including standard treatment schedules employed. Full operational details are available on request, if required.

WOOD PRESERVATIVE : FORMULATION DETAIL

The preservative used in the process is known as Protim 800 and is manufactured by Protim Solignum Ltd in accordance with BS 5707 Part 1 and / or BWPDA Standards. The basic formulation is as follows -

<u>Principal Ingredients</u>	<u>Concentration (%w/w)</u>
Acypetacs zinc (Fungicide)	14.5
Permethrin (Insecticide)	0.1
Hydrocarbon solvent	Balance

HSE Approval No. 4991 (under the Control of Pesticides Regulations 1986)

Hazard Classification : IRRITANT by all routes of exposure.
FLAMMABLE.

Please refer to Protim Solignum Material Safety Data Sheet MSDS 975 for further detail on this product.

PROTIM PREVAC - OPERATIONS SUMMARY - APPLICABLE TO :

ANDREWS MAXI / MINI
 PAPES MAXI
 NEWARK MAXI
 COMPAIR MAXI

PLANT STATUS

END OF PROCESS
 FILL O.S.V.
 1ST VACUUM
 1ST VACUUM TIMING
 1ST TRANSFER
 1ST RELEASE
 PRESSURE
 PRESSURE TIMING
 2ND TRANSFER
 2ND VACUUM
 2ND RELEASE
 END OF PROCESS

	A	B	C	D	E	F	FF	G	J	K	L	PUMP 1	PUMP 2	VAC. RUMPS
END OF PROCESS							✓							
FILL O.S.V.			✓	✓			✓					✓		
1ST VACUUM						✓			✓					✓
1ST VACUUM TIMING							✓		✓					✓
1ST TRANSFER		✓				x	x		✓					✓
1ST RELEASE		✓					✓							
PRESSURE							✓			✓	✓	✓	✓	
PRESSURE TIMING							✓			✓	xx	✓		
2ND TRANSFER	✓						✓	✓	✓					✓
2ND VACUUM				xxx	✓	✓			✓			✓		✓
2ND RELEASE				xxx	✓		✓	✓	✓			✓		
END OF PROCESS							✓							

- x F & FF ALTERNATING TO HOLD VACUUM AT CORRECT LEVEL.
- xx L OPENING & CLOSING TO MAINTAIN PRESSURE LEVEL.
- xxx D OPENING & CLOSING TO CLEAR LEVEL 3.

SYSTEM LAYOUT

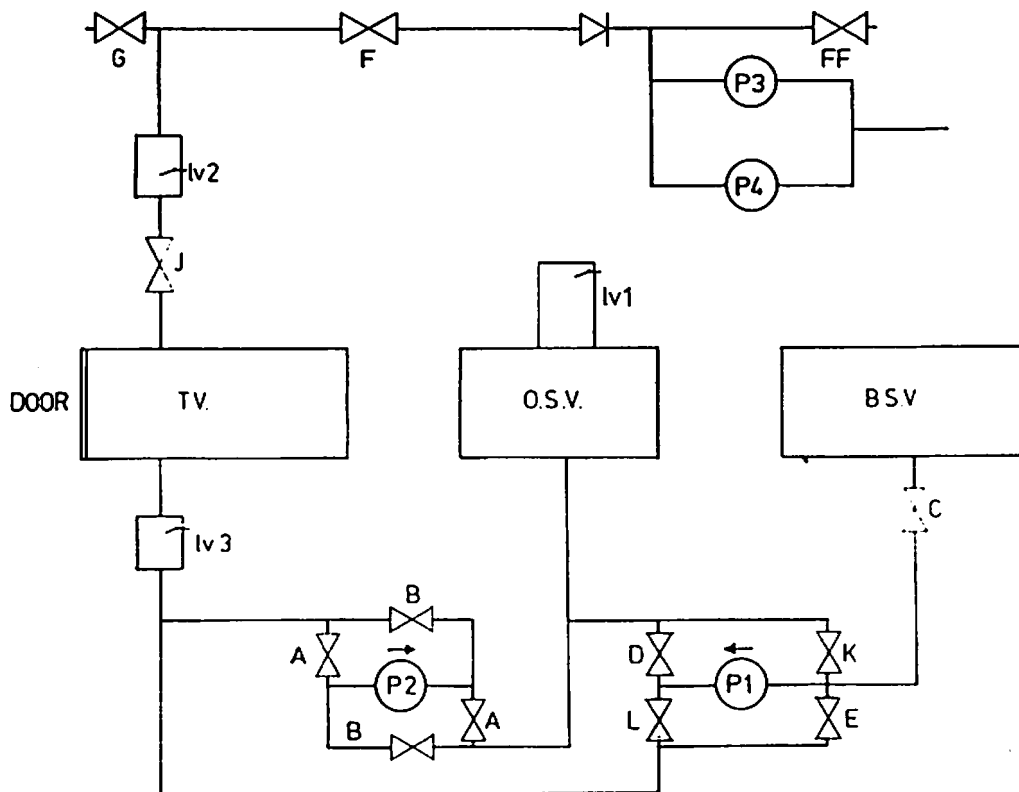
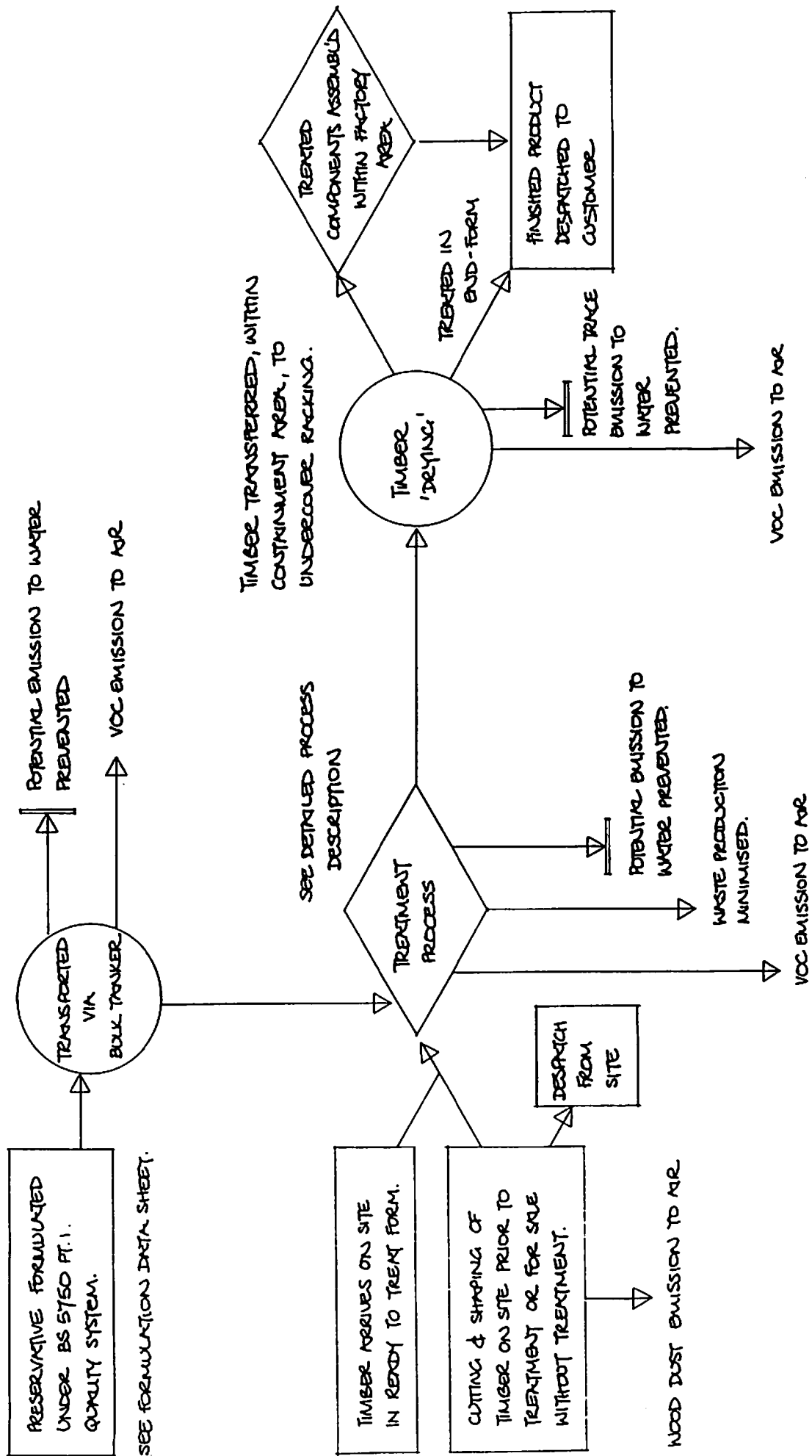


TABLE 5
TREATMENT CYCLES FOR THE APPLICATION OF ORGANIC SOLVENT PRESERVATIVES

Protim Cycle Designation (As used in Tables 1 - 4)	INITIAL VACUUM		PRESSURE		FINAL VACUUM		BSI/BWPDA Cycle Code
	Level	Duration	Level	Duration	Level	Duration	
	Inches mercury	minutes	p.s.i.	minutes	Inches mercury	minutes	
A	10	3	Atmospheric	3	20	20	V1
B	10	5	15	5	20	20	V2
E	5	10	15	40	25	20	V3
C	25	10	15	60	25	20	V4

Approximate conversions: 1bar = 15 p.s.i. = 1 Kg/cm² = 30 in. mercury = 765mm mercury = 100 kPa.



PROTIM SOLIGNUM LTD.	REVISIONS
PROCESS DESCRIPTION / SUMMARY	Raw Material to End Product.
JOB NO. 9118	Part B process (Existing)
	OCTOBER 91

APPENDIX B

PRESCRIBED SUBSTANCES AND THEIR CONTROL

(a) Sources of Emission

The plant in question is an existing process, as defined under the Environmental Protection (Prescribed Processes and Substances) Regulations 1991, falling under Part B of Section 6.7 (Schedule 1).

The "prescribed substance" bringing the process under Part B control is the light organic solvent in the preservative formulation. The potential sources of VOC emission from the process are identified in the summary flow diagram in Appendix A ("Raw Materials to End Product")

(b) Nature of Emission

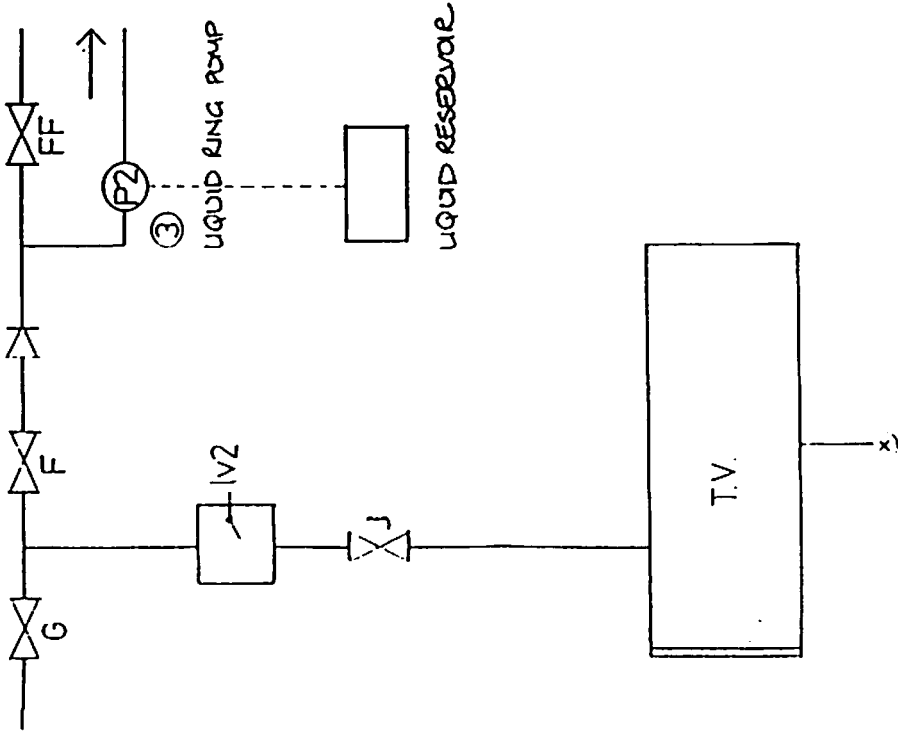
At each stage the emission consists of hydrocarbon solvent fumes (similar to white spirit) in air. Particulate matter is virtually non-existent. Discharge is at ambient temperature.

The following mass balance data describes, in detail, potential VOC emissions to air.

POTENTIAL EMISSION POINTS

- ① DISPLACED AIR DURING DELIVERY OF NEW PRESERVATIVE FLUID.
- ② DISPLACED AIR FROM OSV VENT DURING FLUID TRANSFER FROM TV TO OSV.
- ③ VACUUM PUMP EXHAUST WHILST EVACUATING TV (INCLUDING VESSEL PURGE AT END OF CHARGE).

NOTE: DURING PREVAC PROCESS VALVES "G" & "FF" ONLY ADMIT AIR INTO THE SYSTEM. SEE TEXT FOR FURTHER DETAILS.



x: LINKS TO ENCLOSED FLUID TRANSFER SYSTEM (SEE OPERATING INSTRUCTIONS FOR DETAIL).

PROTIM SOLIGNUM LTD.	REVISIONS
VOC SOURCES	
JOB NO. 9202	DWG. NO. 01
	APRIL 92

PRODUCT MOVEMENT, USAGE AND RELEASE

The following description of the movement of preservative product within a typical system assumes a maximum throughput ("worst case") situation.

The dimensions and fluid holding capacity of the three plant components are typically as follows :

BSV	2.44 x 2.44 x 3.05m	18,000 litres
OSV	2.44 x 2.44 x 3.05m	18,000 litres
TV	1.39 x 1.39 x 7.6m	14,690 litres

(See overleaf for any variations from the above which apply to this site/plant)

The treatment vessel is not used for fluid storage, so the maximum possible fluid volume on site is 36,000 litres. In practice, storage will be, on average, nearer approximately 25,000 litres. One treatment process or "charge" will take, including time for loading / unloading, approximately 60 minutes. During the working day, a busy plant would process up to 6 charges.

It is theoretically possible to load 7m³ of square sawn timber into a treatment vessel of the above dimensions. However, timber pack sizes vary and it is rare that an optimum combination of packs will be available to achieve this volume. An average maximum charge load of 5m³ will be more typical. Preservative uptakes into timber will vary according to species permeability, surface area to volume ratio and the amount of more permeable "sapwood" present. Data collected from the nationwide network of Protim processors, over a number of years, consistently indicates an uptake range of 20-25 litres per m³ timber for this type of process.

The maximum expected usage of preservative fluid therefore

$$\begin{aligned} &= 6 \text{ (charges)} \times 5 \text{ (m}^3 \text{ timber)} \times 25 \text{ (l/m}^3 \text{ uptake)} \\ &= 750 \text{ litres per day} \end{aligned}$$

In this "worst case" situation, the BSV would require replenishing by road tanker approximately once every 24 working days. In practice, deliveries would be slightly more frequent as the BSV should, ideally, not be allowed to run dry.

Implications for plant emissions to air

The preservative product contains a hydrocarbon solvent, essentially similar to white spirit. Solvent vapour is therefore present in the three plant components, both during processing and whilst the unit is shut down.

(a) The discharge concentration from the source points identified has been determined by the following means :

- (i) On site by photo-ionisation detector (PID), calibrated to the preservative fluid in use.
- (ii) Confirmatory laboratory analysis by solvent desorption / gas chromatography.

In both cases, results (expressed as white spirit) consistently fall in the range 4 - 9,000 mg/m³. For the purpose of the following calculations, the higher level will be taken as the "worst case".

(b) The discharge volume / flow during the different process stages has been measured and the total discharge volume for Cycle A (typically 52-55 min. duration) calculated as approximately 42m³/charge.

- (c) Based on these figures an estimate can be made of the "worst case" total mass emission from the plant vents.

Approximate daily emission = 6 x 42 x 9 (grammes)
= 2.27kg white spirit

Implications for fugitive emissions to air from drying timber

Freshly treated timber stacked, under cover, in otherwise open and well ventilated conditions will dry gradually at a rate which decreases with time. Timber is normally dry enough for handling or despatch within 6 hours and for overpainting within 48 hours. The precise rate of drying will depend on prevailing conditions at the time (temperature, air flow rate and direction, humidity, etc). In addition, the depth and total loading of solvent will affect total drying time. Typically, most of the solvent evaporates within a few days, whilst the residual 25% or so of that originally impregnated (the heavier fraction of the white spirit hydrocarbon "mix") will remain in the timber for some considerable time. Indeed, the solvent impregnated deeper into the wood structure, or any subsequently coated with a paint film, may remain within the wood almost indefinitely.

Again, based on the above "worst case" assumptions, we can estimate the total fugitive emission of solvent from the treated timber in storage on site :

Approximate daily emission = usage per day x 75%
= 562.5 litres preservative
= 481 litres white spirit
= 385 kg white spirit

NOTE: From the above it can be seen that emissions from the plant vents alone account for only 0.5% of the total process emissions to air.

AIR EMISSIONS - Control

(a) Fugitive Emissions from Treated Timber

Criteria for the appropriate management of these emissions are currently being evolved at both a national and a European level, in the light of the European Commissions' draft Directive on the control of emissions resulting from the industrial uses of organic solvents. Once this Directive is finalised, the UK Department of the Environment will give appropriate guidance on compliance to both industry and HMIP Inspectors.

At this stage it is important to appreciate that the use of light organic solvents in the wood preserving sector does not pose a significant threat to environmental air quality for the following reasons

- Solvents used are those with the lowest POCP rating.
- Volume of solvent consumed by the sector is extremely small, compared to industry as a whole (i.e. less than 0.25% of total European man-made VOC use).

These points have been agreed by the Commission as part of their Cost Impact Analysis of the forthcoming Directive. The final management strategy felt to be appropriate for fugitive emissions from the process will be agreed between the DoE and industry on the basis of the BATNEEC principle and in the light of evolving national policy on industrial solvent use in general. Upgrading conditions will be incorporated into individual site authorisations at that time. No further details can be included at this stage.

The following comments are also relevant -

(i) Nuisance Odour

This type of process has been in use for over 25 years. During that time comments and complaints relating to the odour of treated timber have been rare and non-existent where material is stored in designated, well ventilated areas away from site offices and site boundaries with adjacent buildings.

(ii) Product / Process Development

In line with the general requirement to employ BATNEEC, the process operator will review on a regular basis, with Protim Solignum, how developing technology may best be incorporated into the operation at an appropriate stage and to an appropriate degree.

 (b) Emissions from Plant Vents / Exhausts 

Reference is made to DOE Note PG6/3 (1991 with 1994 amendments) for guidance on what constitutes BATNEEC with respect to plant emissions (as opposed to emissions from freshly treated timber).

As has already been seen, emissions from the plant vents alone account for only 0.5% of the total process emissions to air. At this level it has been agreed with DOE Air Quality Division that the cost / benefit balance resulting from the use of abatement to filter such emissions does not represent BATNEEC. Instead, the 1994 revision of PG6/3 requires that all emissions from tank vents be piped together and discharged through a stack, after passing through a coalescing filter to remove droplets. The stack is to be at least 2 metres higher than the roof ridge height of any building within 15 metres. There is no requirement to monitor emissions from the stack during normal operation.

The plant and process referred to in this application will be modified to comply with these control measures, so achieving the BATNEEC objective. (See upgrading programme in Appendix B).

APPENDIX C

COMPLIANCE PROCEDURES

To demonstrate compliance with possible authorisation conditions relating to -

- (i) Feedstock quality (where it affects the releases to the environment).
- (ii) Process parameters.
- (iii) Performance of pollution abatement plant.
- (iv) Quality assurance plans
- (v) Record keeping

the following systems are in place :

- (i) Preservative is manufactured by Protim Solignum Ltd who are a BS 5750 (Part 1) registered company. Product quality is therefore monitored and controlled as part of their Quality Management System, regularly assessed by BSI.

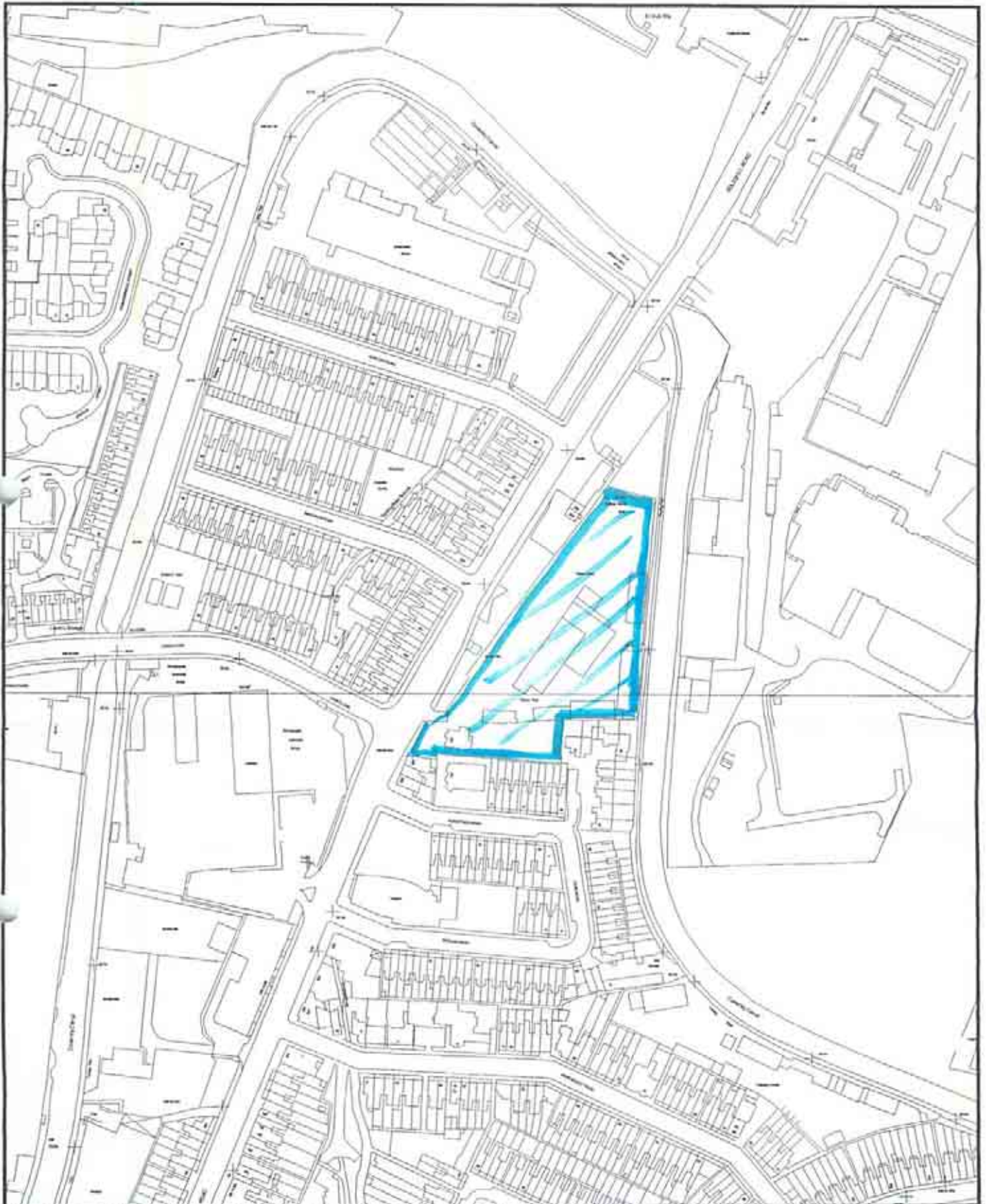
(ii), (iv) and (v)

The effective control of process parameters and record keeping is covered in the Protim Solignum training programme (see following records). Protim Technical staff will monitor these items as part of the periodic audits of the process.

- (iii) Not applicable - see Appendix B

Protim Solignum technical staff will carry out periodic Safety and Environmental Audits of the plant and site approximately twice a year.

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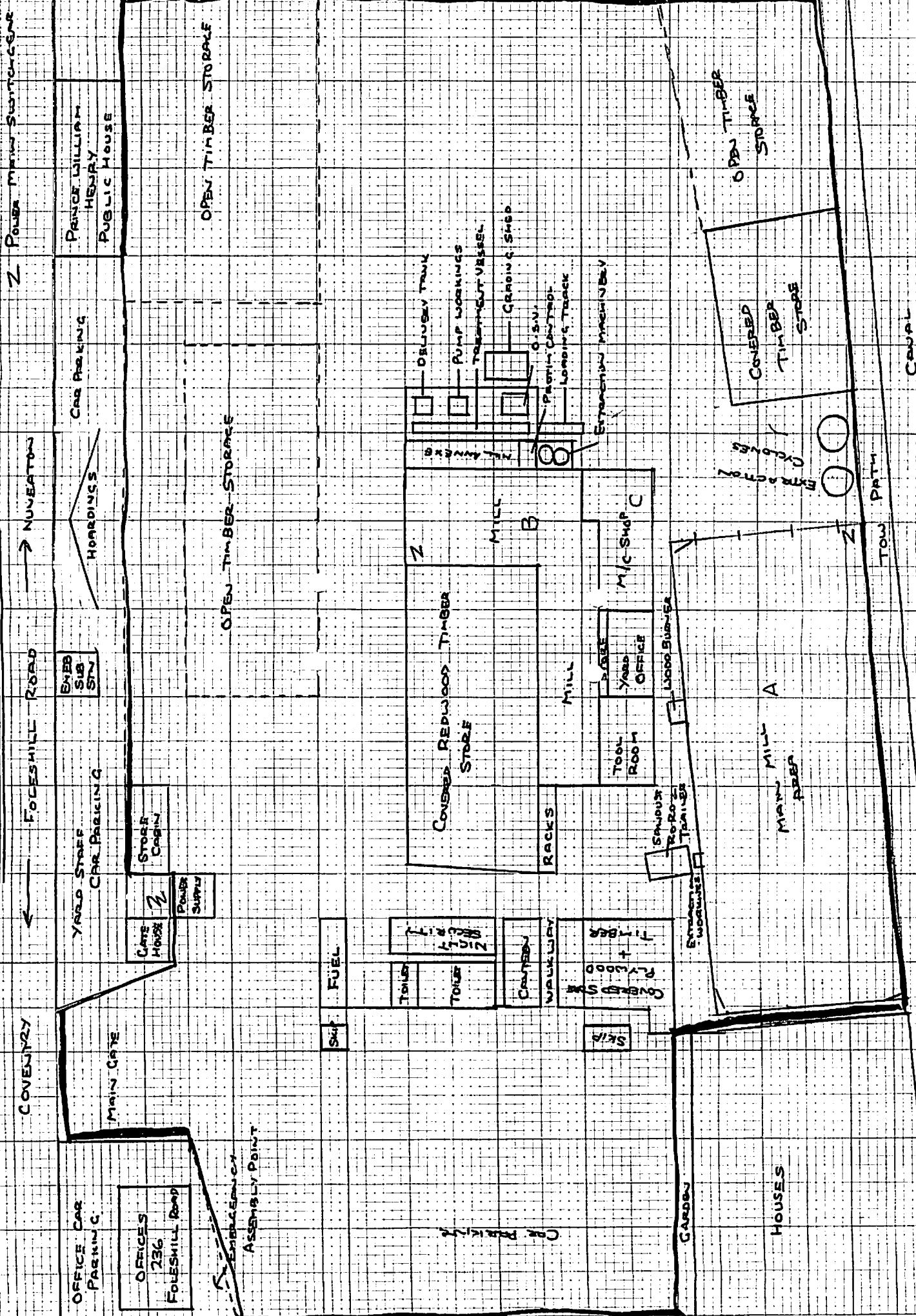


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Output On Plan Chest

Scale:1:2500
Plot Date:15/2/1996
By:HAZEL EVANS
Dept:CITY DEVELOPMENT

GENERAL SITE LAYOUT

NOT TO SCALE



COVENTRY

OFFICE CAR PARKING

OFFICES
236
FORESHILL ROAD

MAIN GATE

YARD STAFF CAR PARKING

GATE HOUSE

STOCK CABIN

PUMP SUPPLY

SKIP FUEL

TOWER

TOWER

CRANE

WALKWAY

SKIP

COVERED REDWOOD TIMBER STORE

TRANSFORMER

FORESHILL ROAD

SWEB SUB STN

HOARDINGS

NUVEATON

OPEN TIMBER STORAGE

OPEN TIMBER STORAGE

CAR PARKING

PRINCE WILLIAM HENRY PUBLIC HOUSE

COVERED REDWOOD TIMBER STORE

MILL B

RACKS

MILL

TOOL ROOM

YARD OFFICE

PAGE

MILL SHOP C

SHED

WOOD BURNER

GENERATING MACHINERY

GENERATING MACHINERY

GENERATING MACHINERY

GENERATING MACHINERY

GENERATING MACHINERY

GENERATING MACHINERY

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GENERATING MACHINERY

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HOUSES

MAIN MILL AREA

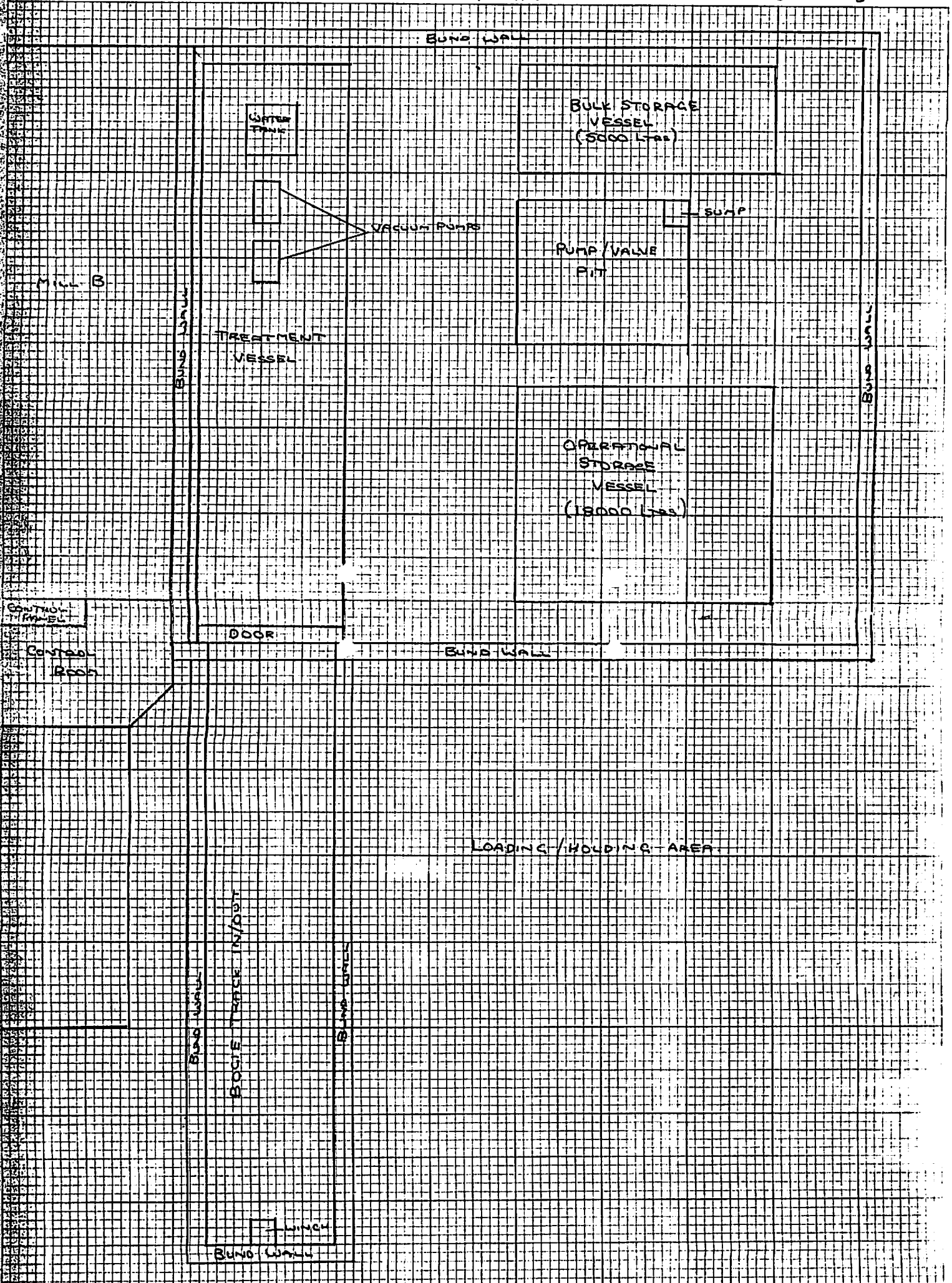
TOU

PATH

COUPL

PLAN OF TIMBER TREATMENT AREA

NOT TO SCALE



SCHEMATIC PLAN OF L.E.V. CONNECTIONS

- 1) Hilti Power Saw
- 2) Wood-Buesch Power Planer
- 3) Robinson CROSS-CUT SAW
- 4) LEACH CROSS-CUT SAW
- 5) Robinson 36" Band-SAW
- 6) Robinson 4 Side Planer
- 7) Robinson 48" Band-SAW
- 8) Robinson 248" Band-SAW
- 9) 75 WoodBuser
- 10) 500 WoodBuser
- 11) Colson Roto-Skip

