Huntingdonshire
DISTRICT COUNCIL

Application for an A2 Permit

Local Authority Integrated Pollution Prevention and Control
Pollution Prevention and Control Act, 1999
Environmental Permitting (England and Wales) Regulations 2010 (as amended)

Introduction

When to use this form

If you are sending an application Huntingdonshire District Council for an integrated pollution control permit, known as Part A(2) installations, with respect to the preservation of wood and wood products with chemicals with a production capacity exceeding 75m^3 per day other than exclusively treating against sapstain under the Environmental Permitting (England and Wales) Regulations 2010 as amended ("the EP Regulations").

Before you start to fill in this form

You are strongly advised to read relevant parts of the Defra general guidance manual issued for LA-IPPC and LAPPC and available at http://www.defra.gov.uk/industrial-emissions/las-regulations/guidance/. This contains a list of other documents you may need to refer to when you are preparing your application, and explains some of the technical terms used. You will also need to read the relevant Sector Guidance Note or BREF note as relevant. The current Sector Guidance Note is only available in draft form and is available at:
http://www.sepa.org.uk/air/process_industry_regulation/pollution_prevention_control/guidance/idoc.ashx?docid=dcab11ca-035e-4571-8fc3-48a70258fdc3&version=1
The EP Regulations can be obtained from The National Archives via their website at http://www.legislation.gov.uk/.

It is also recommended that you speak to an officer before you complete and submit the application. We have made the application form as straightforward as possible, but please get in touch with us using the details given below if you need any further advice.

Which parts of the form to fill in

You should fill in as much of this form as possible. The appropriate fee must be enclosed with the application to enable it to be processed further. When complete return to:

Environmental Protection Officer
Huntingdonshire District Council
Pathfinder House
St Mary's Street
Huntingdon
PE26 3TN

Other documents you may need to submit

There are number of other documents you will need to send us with your application. Each time a request for a document is made in the application form you will need to record a document reference number for the document or documents that you are submitting in the space provided on the form for this purpose. Please also mark the document(s) clearly with this reference number.

Using continuation sheets

In the case of the questions on the application form itself, please use a continuation sheet if you need extra space; but please indicate clearly on the form that you have done so by stating a document reference number for that continuation sheet. Please also mark the continuation sheet itself clearly with the information referred to above.

Copies

Huntingdonshire District Council public register is kept electronically and would appreciate your application to be submitted electronically. If you are sending the application in hardcopy please ensure that the application is scanner friendly.

A2 Permit Application Form
To be completed by the Operator

A	The basics

A1	Name and address of the installation			
	Name	Kingspan Timber Solutions Limited		
	Address	Eltisley Road, Great Gransden, Sandy, Bedfordshire		
	Postcode	SG19 3AR	Telephone N°	01767 676400

A2	**Please give details, below, of any existing LAPC or IPC authorisation for the installation, or any waste management licences or water discharge consents, including reference number(s), type(s) and local authority.**
	Schedule 1 part 2, section 6.6 Part B Timber permit reference B02/01 Huntingdonshire District Council. **Environment Agency.** AN/PRCNF00364/001 – Water Discharge consent CB/FM3982YH/A001 - Waste Broker & Dealer OOV614 – Hazardous waste producer EPR/VF0832FG/A001 - Waste Exemptions

A3	**The Operator** (the person who it is proposed will have control over the installation in accordance with the permit (if granted)). **Please provide the full name of company or corporate body or the name of the sole trader or the names of the partners.**			
	Name	Kingspan Timber Solutions Limited		
	Trading name if different	N/A		
	Registered office address			
	Eltisley Road, Great Gransden, Sandy, Bedfordshire,			
	Postcode	SG19 3AR	Telephone N°	01767 676400
	Principle office address, if different			

Postcode		Telephone N°	
Company registration number	4911159		

A4	**Any holding company? Please indicate below if the operator is a subsidiary of a holding company within the meaning of section 1159 of the Companies Act 2006.**			
	Yes ☑ No ☐			
	Holding company name			
	Name	Kingspan Group plc		
	Trading name if different	N/A		
	Holding company registered office address			
	Dublin Road, Kingscourt, Co. Cavan, Ireland			
	Postcode		Telephone N°	00353 42 969 8000
	Principle office address, if different			
	N/A			
	Postcode		Telephone N°	
	Company registration number	492793		

A5	**Who can we contact about your application?** *It will help to have someone who we can contact directly with any questions about your application. The person you name should have the authority to act on behalf of the operator. This could be an agent or consultant rather than the operator.*			
	Name	Robert Stewart		
	Position	Principal Consultant		
	Address	Ricardo-AEA,		
	Postcode		Telephone N°	
	Email	robert.stewart@ricardo-aea.com		
A6	**Who can we contact about your permit?** *Assuming your permit will be issued it will help to have someone who we can contact directly with any questions about your permit*			
	Name	Martin Waker		
	Position	Operations Manager		

Address	Eltisley Road, Great Gransden, Sandy, Bedfordshire		
Postcode	SG19 3AR	Telephone N°	01767 676400
Email	martin.waker@kingspan.com		

B	The installation	
B1	**Why is the application being made? Please tick which statement is correct.**	
	The installation is new.	
	The installation currently exists but changes to the installation or to the EP Regulations means that an LA-IPPC A2 permit is required.	✓

B2	Directly associated activities	
	Please list all activities, below, directly associated for the preservation of wood and wood products undertaken at your installation.	
	We are interested in any activities that: • Have a technical connection with the treatment plant • Could have an effect on pollution. For an explanation of what is a directly associated activity please go to Annex III of the General Guidance Manual.	
	Main activities	**Section in Schedule 1 to the EP Regulations**
	Preservation of wood and wood products with chemicals with a production capacity exceeding 75 m3 per day other than exclusively treating against sapstain	s.6.6(A2)(a)
	Directly-associated activities	**Schedule 1 references (if any)**
	none	

B3	Site Maps
	Please provide a location map with a red line round the boundary of the installation and a blue line around any other land owned/used by the operator.

Document Reference:	See attached supporting information Appendix 1

Please provide a site plan or plans showing where all the directly associated activities are on site as well as drying areas, any storage areas, emission/discharge points and site drainage.

Document Reference:	See attached supporting information Appendix 1

C The details

C1 Plant on site

Please list all plant, below, that will be used on site and, where known, include the make, model, serial number and storage capacity.

Treatment Plant	Component	Description	Quantity / Size
Plant 1	T3 Service Measure Tank	Fluid uptake - visual measure	0.62m diameter x 1.83 (0.3m3)
Plant 1	T2 Operational Storage Vessel	Storage vessel of treatment chemical	2.45m x 2.45m x 3.06m (18.4m3)
Plant 1	Pump	Treatment vessel Fill / Empty Pump	4.0 kW
Plant 1	Pump 1	Transfer / Pressure / Recovery Pump	7.5kW
Plant 1	Treatment vessel	Timber Treatment chamber	1.37m x 1.37m x 10.7m (20.1m3)
Plant 1	Vacuum Receiver		
Plant 1	Vacuum Pumps		4 No. 4kW pumps
Plant 1	Service Liquid Tank		2 No. tanks
Plant 1	Bogies plus rails	For movement of timber in and out of treatment vessel	
Plant 2	T9 Bulk Storage Vessel	Plant 1 and 2 Bulk storage for treatment chemical	2.45m x 2.45m x 3.05 (18.3m3)
Plant 2	T5 Service Measure Tank	Fluid uptake - visual measure	0.62m diameter x 1.83 (0.3m3)
Plant 2	T4 Operational Storage Vessel	Storage vessel of treatment chemical	2.43m x 2.45m x 3.06m (18.4m3)
Plant 2	Pump	Treatment vessel Fill / Empty Pump	4.0 kW
Plant 2	Pump	Transfer / Pressure / Recovery Pump	7.5kW
Plant 2	Treatment vessel	Timber Treatment chamber	1.37m x 1.37m x 10.1m (19.0m3)
Plant 2	Vacuum Receiver		
Plant 2	Vacuum Pumps		4 No. 4kW pumps
Plant 2	Service Liquid Tank		2 No. tanks
Plant 2	Bogies plus rails	For movement of timber in and out of treatment vessel	

Document Reference:	

C2 How will the installation operate?

Please supply description of how the installation will operate starting with raw materials and finishing with finished product and wastes leaving the site.

See attached supporting information section 2

Document Reference:	ED60731

C3	Releases, techniques and monitoring?	
	What pollutants (including odour) could be released to air, water or land? Please say which stage of the process each release will come from and also whether from a particular chimney, vent, pipe or other source (diffuse or fugitive). Please include releases during starting and shutting down the plant, and from possible breakdowns or accidents e.g. deliveries identified by a risk assessment. (*Using process flow diagrams may help to simplify this.*)	
	See attached supporting information Section 3	
	Document Reference:	ED60731
	What techniques will be used to minimise each release in line with BAT? What monitoring has been undertaken (give results) and what monitoring is proposed?	
	See attached supporting information Section 3	
	Document Reference:	ED60731

C4	Groundwater discharges
	What discharges will there be of List I or List II substances? How will the Groundwater Regulations be complied with?
	There are NO direct discharges of List 1 or 2 substances The installation uses: • Permethrin Hazardous substance List I Organohalogen 052645-53-1 • Tebuconazole Hazardous substance List I Organohalogen 107534-96-3 • Propiconazole Hazardous substance List I Organohalogen 060207-90-1 All Contained within Vacsol Aqua treatment product however it is fully contained within the bunded areas attached to a blind sump. In accordance with BAT 58 SG11 (draft). There is no intentional point source emissions of List I and List II substances as defined by the Water Framework Directive to groundwater. The Vacsol Aqua product is fully contained within bunded areas. Spillage containment procedures exist where inadvertent spillage of product occurs.

C5	Raw materials, water, etc
	What raw and auxiliary materials, other substances and water do you propose to use?

Raw material	Use /annum
Timber (cubic metres)	Commercially Sensitive data - Available on request
Treatment chemical (litres)	Commercially Sensitive data - Available on request
Water (cubic metres)	Commercially Sensitive data - Available on request
The quantities of raw material use is considered commercially confidential. An application has been made to that effect. The quantities and use of the raw materials are available for inspection on site if required. Please contact Martin Waker for an appointment to review the data	

C6	**What sorts and amounts of waste will be produced by the activities? What steps will be taken to comply with the revised Waste Framework Directive hierarchy (prevention, preparation for re-use, recycling, other recovery, disposal).**

There are 3 main potential wastes.

- Waste liquids associated with the treatment process
- Waste treated timber generated through the manufacturing and treatment processes.
- General waste associated with maintenance and cleaning of the treatment plant

The nature of the process means that there are very few wastes generated.

Treatment chemicals are consumed during the treatment process. Any surplus chemical, which is not absorbed into the timber, is collected within the treatment vessel and automatically returned to the operating storage tanks for reuse within the next cycle, thus preventing waste.

The Vacsol Aqua treatment product currently in use is a low environmental impact product that is fully contained and reused on site.

The manufacturing and treatment process avoids treating waste timber. All timbers are processed to size and length prior to treatment.

Processed timber is loaded onto bearers on the treatment plant bogies and secured into position (with reusable straps). Careful handling minimises the possibility of damage and therefore avoids reject timbers.

Timber rejected due to insufficient treatment is identified through quality control and is reprocessed.

General wastes associated with maintenance and cleaning are minimal and are removed from site by maintenance contractors.

Document Reference:	ED60731

C7	**Energy**

How much energy will be consumed and generated? Please identify each source and end use, and proposed measures to improve energy efficiency? Please list any climate change or carbon emission measure signed up to.	
See attached supporting information section 3.5	
Document Reference:	ED60731

C8	**Noise and vibration**
What are the main sources of environmental noise and vibration, where are the nearest noise-sensitive receptors, and what techniques will be used to minimise noise and vibration in line with BAT? Please provide data from any noise surveys.	
See attached supporting information section 3.6	
Document Reference:	ED60731

C9	**Site report**
Please provide a site report in line with Chapter 18 of the General Guidance Manual and the Wood Preservation Link Authority Site Report Guidance.	
Document Reference:	Ref: 21398 part A2 Assessment (Ian Farmer Associates)

C10	**How will the installation be returned to a satisfactory state?**
What measures are proposed to be taken to avoid any pollution risk to land and return the site of the installation to a satisfactory state upon definitive cessation of activities?	
The treatment area has a concrete impermeable surface, spill containment kerbs, sealed construction joints and a bunded exterior to contain treatment solution in the unlikely event of failure of any part of the treatment plant Drains within the installation have been sealed to prevented liquid egress in the event of a spillage. The installation is within a bunded area which is capable of holding 110% of the volume of the largest storage vessel. The treated timber is removed from the treatment vessel only when valuable treatment liquor has stopped dripping from it. Once removed, the timber is stored within the treatment plant building on the bogies and rails until drip free and defined as dry. Visual inspection of the installation concrete surface shows no evidence of staining, and this indicates that there is adequate control of the chemical.	
Document Reference:	ED60731

C11	**Environmental management**

What environmental management procedures and policy will you deploy?	
The company has the following documents: Policies • Environmental Policy Statement. • ISO 14001 Environmental Management System – Certificate Number 388-8EMS Documents and procedures • Site work procedures (treatment) • ARCH Timber Protection Code of Practice (COP 30 Issued November 2008) VACSOL Aqua Treated Timber & Plywood Code of Practice	
Document Reference:	

C12	**Impact on the environment**

a) What are the potential significant local environmental effects (including nuisance) of the foreseeable releases?

There are no potential significant releases from the installation during normal use.

The most significant releases from the installation would be as a result of either plant failure or spillage during delivery, both have the potential to generate a major pollution issue.

Kingspan Timber Solutions Ltd. have the following prevention measures in place:-

- A failure of the treatment plant could lead to a spray of Vacsol Aqua treatment chemical due to pressures within the system. In this situation the majority of liquid lost would be expected to be contained within the process building and bunded areas (as would be the case with a low pressure release). In the unlikely event that the liquid be sprayed outside the bunded area, there are spillage containment kits available to prevent the liquid from entering the surface water system.
- The delivery point itself is inside the bunded area with the delivery process controlled by the driver and plant operator who are both suitably trained. Spillage containment kits are available to safeguard the surface water system if necessary.

Document Reference:	ED60731

b) Is the installation likely to have a significant effect on sites of special scientific interest (SSSIs) or European protected sites and, if it is, what are the implications for the purposes of the Conservation (Natural Habitats etc.) Regulations 1994 (see appendix 2 of Annex XVII of the General Guidance Manual)

No. Source: https://designatedsites.naturalengland.org.uk/SiteSearch.aspx

Document Reference:	ED60731

c) Has an environmental impact assessment been carried out for the installation under planning legislation or for any other purpose? If so, please provide a copy

No

Document Reference:	

C13	Alternatives
	Please state what alternatives there are available: a) To the control techniques proposed in your application
	• The Vacsol treatment process is well understood having been operated for many years and managed according to manufacturer's instructions. • Management controls in place prevent unauthorised use of the plant. • The quantity of emissions is low and are fugitive in nature. • Control mechanisms are to contain operations within suitably bunded areas. There are no other suitable alternatives necessary as the systems currently in place are sustainable.
	Document Reference :
	b) To your customers should the local authority not grant your permit
	Document Reference: The site is already permitted to operate as a Part B installation. The site operates as a low risk installation. There is no reason why a permit for the treatment operation (which has been carried out for over 35 years) should be refused.
	Please note that this information is required under the Public Participation Directive and does not reflect any pre-determination of your application.

D	Non-technical summary	
	Please provide a non-technical summary of the information required above.	
	Document Reference:	See attached supporting information section, Non-Technical Summary within document ED60731

E	Anything else?
	N/A

F	Application fee
	You must enclose the relevant fee with your application. If your application is successful you will also have to pay an annual subsistence charge, so please say who you want invoices to be sent

Name	Kingspan Timber Solutions Limited		
Address	Eltisley Road, Great Gransden, Sandy, Bedfordshire		
Postcode	SG19 3AR	Telephone N°	01767 676400

G	Protection of Information

G1	Any confidential or national security info in your application?

If there is any information in your application you think should be kept off the public register for confidentiality or national security reasons, please say what and why. General Guidance Manual chapter 8 advises on what may be excluded. (*Don't include any national security information in your application. Send it, plus the omitted information, to the Secretary of State or Welsh Ministers who will decide what, if anything, can be made public.)*

Yes ☑ No ☐

Document Reference:	ED60731 Appendix 5

G2	Please note: Data Protection

The information you give will be used by the Council to process your application. It will be placed on the relevant public register and used to monitor compliance with the permit conditions. We may also use and or disclose any of the information you give us in order to:

- consult with the public, public bodies and other organisations,
- carry out statistical analysis, research and development on environmental issues,
- provide public register information to enquirers,
- make sure you keep to the conditions of your permit and deal with any matters relating to your permit
- investigate possible breaches of environmental law and take any resulting action,
- prevent breaches of environmental law,
- offer you documents or services relating to environmental matters,
- respond to requests for information under the Freedom of Information Act 2000 and the Environmental Information Regulations 2004 (if the Data Protection Act allows)
- assess customer service satisfaction and improve our service.

We may pass on the information to agents/representatives who we ask to do any of these things on our behalf.

G3	Please note: it is an offence to provide false etc. information

It is an offence under regulation 38 of the EP Regulations, for the purpose of obtaining a permit (for yourself or anyone else), to:

- make a false statement which you know to be false or misleading in a material particular,
- recklessly make a statement which is false or misleading in a material particular
- intentionally to make a false entry in any record required to be kept under any environmental permit condition
- with intent to deceive, to forge or use a document issued or required for any purpose under any environmental permit condition.

If you make a false statement

- we may prosecute you and, if you are convicted, you are liable to a fine or imprisonment (or both).

H	Declarations A and B for signing

These declarations should be signed by the person listed in answer to question A3. Where more than one person is identified as the operator, all should sign. Where a company or other body corporate is the operator, an authorised person should sign and provide evidence of authority from the board.

Declaration A

I/We certify

EITHER- No offences have been committed in the previous five years which are relevant to my/our competence to operate this installation in accordance with the EP Regulations.

OR- The following offences have been committed in the previous five years which may be relevant to my/our competence to operating this installation in accordance with the regulations:

Signature	M. D. Wake.
Name	MARTIN WAKER
Position	OPERATIONS MANAGER.
Date	11TH JUNE 15

Declaration B	
I/We certify that the information in this application is correct. I/We apply for a permit in respect of the particulars described in this application (including the listed supporting documentation) I/we have supplied. *(Please note that each individual operator must sign the declaration themselves, even if an agent is acting on their behalf.)*	
Signature 1	M. D. Wak.
Name	MARTIN WAKER
Position	OPERATIONS MANAGER
Date	11TH. JUNE 15
Signature 2	
Name	
Position	
Date	

RICARDO-AEA

Kingspan Timber Solutions Ltd. Permit Application – Supporting information

Great Gransden Site

Report for Kingspan Timber Solutions Ltd

ED60731

Customer:

Kingspan Timber Solutions Ltd

Customer reference:

ED60731

Contact:

Tony Higgins
Ricardo-AEA Ltd
Gemini Building, Harwell, Didcot, OX11 0QR, United Kingdom
t: +44 (0) 1235 75 3274
e: tony.higgins@ricardo-aea.com
Ricardo-AEA is certificated to ISO9001 and ISO14001

Author:

Tony Higgins

Approved By:

Robert Stewart

Date:

08 June 2015

Ricardo-AEA reference:

Ref: ED60731 Report- Issue Number 2

Non-Technical summary

Kingspan Timber Solutions Limited design, manufacture and supply prefabricated housing components, some of which pass through the timber treatment process. Manufacture involves the sawing, shaping, drilling, sanding, preservative treating and assembly of timber and timber based products. The timber raw material is delivered to the factory, loaded into the relevant workshop and cut to size as appropriate. This process is regulated by Huntingdonshire District Council as a Part B installation dealing with potential air emissions.

Where necessary timbers are treated with a water-based preservative to prevent rot and / or insect attack. The process involves the use of a vacuum / low pressure impregnation plant to treat the timber. The timber is then stacked and stored before either being taken off site or loaded into the workshop for assembly into prefabricated housing components prior to despatch. Due to a change in European legislation this process requires the company to apply for another environmental permit to continue to operate. The application form, and this supporting documentation comprise that application.

Treatment of timber to prevent rot or insect attack inherently requires the use of chemicals considered to be of concern should they escape to the environment. These include pesticides, herbicides and anti-fungal chemicals which, if they escape the site could be polluting and cause harm to the environment. The purpose of this application is to describe how these chemicals are used and controlled so that they cannot escape and cause harm.

This report is separated into 4 sections:

Section 1	An introduction
Section 2	A description of the process and activities specific to the treatment operations
Section 3	An evaluation of emissions and potential environmental impact of the activity
Section 4	Further information relevant to the preparation of an environmental permit

A number of appendices provide additional details, location plans, schematics and other documents.

The timber treatment activity has been carried out at the site for many years. The activities on site will not change significantly (unless the new permit requires changes). The control mechanisms in place meet the standards required by the draft guidance and the application highlights those controls so that an appropriate permit can be issued by the local authority.

There are two principle means of control. Firstly, the company make use of chemicals that are selected for maximum effect but minimal environmental impact. The treatment chemical used (Vacsol Aqua) is a water based treatment, mixed off-site by the manufacturer and delivered in a ready to use (RTU) form. This chemical replaced more harmful chemicals used some years ago. The second means of control is containment. The treatment process is contained in a small building on site. The treatment vessels are self-contained and sealed to prevent leaks. The chemicals used are fully recycled so there are no waste products arising and all cleaning is carried out using water that is then introduced back into the process. The treatment plant (and the chemical storage tanks) are stored within a fully bunded concreted area designed to contain the chemicals in the event of a spillage. The only possible environmental emissions would be from the fugitive release of odour during the curing process as the treated timber dries. These emissions are of short duration and would only be noticeable onsite close to the curing timber.

This application highlights additional controls on an already existing industrial process that has been regulated by the local authority for a number of years. The existing permitted installation (that includes the treatment plant), has been consistently regulated as a low risk installation over the last few years. The company intend to apply the same rigorous approach to compliance with this new permit as for the existing.

Table of contents

1 Introduction

The following information provides supporting information for the A2 permit application for a timber treatment process.

Due to a change in primary legislation the existing timber treatment facility now requires an environmental permit in order to operate.

This document should be read in conjunction with the A2 application form supplied by Huntingdonshire District Council.

This document references BAT requirements from the draft guidance note SG11 Guidance for Wood Products preservation with chemicals.

2 Process Description

2.1 Delivery, storage and handling of raw materials

The operator currently ensures that all deliveries are carried out in such a way so as to minimise noise, spillage, leaks and emissions. The site is remote from nearest sensitive receptors with suitable access. Deliveries are carried out in the day time to avoid unnecessary disturbance. The location of the delivery points for the installation within the Kingspan Timber Solutions Ltd. site is over 150m from the nearest sensitive receptor (see site location plan in Appendix 1). It is not anticipated that deliveries cause difficulties and there are no known complaints about deliveries storage or handling of raw materials.

2.1.1 Storage areas

As required by the draft guidance, storage areas for materials containing solvents and treatment chemicals are under cover and protected from the elements to avoid or minimise environmental impact.

Storage areas for solvents and treatment chemicals are within bunded areas and contained. The containment area / bund incorporates the storage tanks and treatment vessels.

No bulk storage of solvents is undertaken at the site.

The Vacsol Aqua liquid product is delivered straight to the VACSOL process equipment itself where it is stored until use.

2.1.2 Deliveries

Vacsol Aqua product is provided by Lonza Wood Protection by controlled bulk tanker deliveries straight into site bunded storage tank (Ready to use solution)

Deliveries to the VACSOL process equipment will be supervised by trained personnel to avoid potential accidents and spillage.

Once delivered the raw materials are automatically transferred between the storage vessel and the two treatment plants all within the bunded area via permanent rigid pipework.

The displaced air from storage tanks during filling operation is not believed to be an issue as the location is remote from the site boundary. This is in accordance with the requirements of SG11 to minimise odour.

2.1.3 Installation

The site is dedicated to the design, manufacture and supply of prefabricated housing components. This involves the sawing, shaping, drilling, and sanding of timber and timber based products. The timber is delivered to the site, loaded into the relevant workshop, cut as appropriate. Where

necessary timbers are treated with a water-based preservative to prevent rot and / or insect attack. The process involves the use of vacuum / low pressure impregnation plant to treat the timber. The timber is then stacked and stored before either being taken off site or loaded into the workshop for assembly into prefabricated housing components prior to despatch.

The activity applied for is limited to the timber chemical pressure treatment process and associated storage and waste. The proposed installation is located within an existing Part B Timber activity already regulated by Huntingdonshire District council under permit reference B02/01 dated 21.10.14.

The timber treatment activity is considered to be a stand-alone operation. Not all timber products manufactured on the Kingspan Timber Solutions Ltd. site require treatment, and those that do could be subjected to treatment remote from the site. On that basis it is considered that the A2 activity is not technically connected to the rest of the installation.

Site installation consists of the activities, plant and equipment listed in tables below.

Technically connected & associated Activity	Description of activity undertaken
Storage of raw materials	Storage of timber and liquid chemical.
Chemical Treatment process	Activity under section 2.3(A2) Environmental Permitting (England and Wales) Regulations 2010 (as amended) via 2 vacuum / pressure impregnation plants designated Plant 1 & 2
Storage of waste	*Storage of timber waste products. (negligible)*

Treatment Plant	Component	Description	Quantity / Size
Plant 1	T3 Service Measure Tank	Fluid uptake - visual measure	0.62m diameter x 1.83 (0.3m^3)
Plant 1	T2 Operational Storage Vessel	Storage vessel of treatment chemical	2.45m x 2.45m x 3.06m (18.4m^3)
Plant 1	Pump	Treatment vessel Fill / Empty Pump	4.0 kW
Plant 1	Pump 1	Transfer / Pressure / Recovery Pump	7.5kW
Plant 1	Treatment vessel	Timber Treatment chamber	1.37m x 1.37m x 10.7m (20.1m^3)
Plant 1	Vacuum Receiver		
Plant 1	Vacuum Pumps		4 No. 4kW pumps
Plant 1	Service Liquid Tank		2 No. tanks
Plant 1	Bogies plus rails	For movement of timber in and out of treatment vessel	

Treatment Plant	Component	Description	Quantity / Size
Plant 2	T9 Bulk Storage Vessel	Plant 1 and 2 Bulk storage for treatment chemical	2.45m x 2.45m x 3.05 (18.3m3)
Plant 2	T5 Service Measure Tank	Fluid uptake - visual measure	0.62m diameter x 1.83 (0.3m^3)
Plant 2	T4 Operational Storage Vessel	Storage vessel of treatment chemical	2.43m x 2.45m x 3.06m (18.4m^3)
Plant 2	Pump	Treatment vessel Fill / Empty Pump	4.0 kW
Plant 2	Pump	Transfer / Pressure / Recovery Pump	7.5kW
Plant 2	Treatment vessel	Timber Treatment chamber	1.37m x 1.37m x 10.1m (19.0m^3)
Plant 2	Vacuum Receiver		
Plant 2	Vacuum Pumps		4 No. 4kW pumps
Plant 2	Service Liquid Tank		2 No. tanks
Plant 2	Bogies plus rails	For movement of timber in and out of treatment vessel	

Site plans and reference documents

Site Location Plan – Appendix 1 – 1.1

Site Layout Plan – Appendix 1 – 1.2

Installation Boundary & Drainage Plan – Appendix 1 – 1.3

Timber Impregnation Plant Schematic 'Schematic – Treatment Plant No. 1', Drawing No. V12800-D - Appendix 2 – 2.1

Timber Impregnation Plant Schematic 'Schematic – Treatment Plant No. 2', Drawing No. V13293-A, - Appendix 2 – 2.2

2.1.4 The timber treatment process

The Timber treatment process uses pressure vessels to ensure that the chemical preservatives are applied efficiently.

VACSOL Aqua treated timber is timber which has been low pressure impregnated with VACSOL Aqua wood preservative under controlled conditions in a low pressure, double vacuum timber impregnation plant. The treatment facility comprises two low pressure treatment vessels and associated storage tanks for VACSOL Aqua.

VACSOL Aqua is a water based wood preservative that contains organic ingredients including triazole fungicides and an insecticide. When impregnated into the timber the preservative forms an envelope of protection within the timber.

VACSOL Aqua treated timber gives long term protection against fungal and insect attack for both internal and external (out of ground contact) construction and joinery timbers. External treated timbers must be subsequently protected with a maintained and appropriate surface coating.

Following are the basic treatment process stages and emissions from each stage:

i. Timber is loaded onto bogies ready for loading into the treatment vessel.

ii. The bogie is loaded into the vessel and the autoclave door is closed and locked.

iii. Once the treatment vessel is confirmed as locked and other pre-checks completed an initial vacuum in the treatment vessel is created. The plant uses a liquid ring vacuum pump so emissions from the vacuum pump outlet will be air and water vapour. Emission monitoring shows negligible release of other components. (See diagram 1 below)

iv. The treatment vessel is flooded with VACSOL Aqua preservative whilst still under vacuum.

v. Residual vacuum is released and the timber is allowed to soak at atmospheric pressure for a predetermined time. Application of hydraulic pressure within the treatment vessel is also occasionally applied up to 1 or 2 BarG max dependent on vessel design to force the product into the timber cell structure. (See diagram 2 below)

vi. Pressure is released (if applied) and the VACSOL Aqua preservative is returned to the operational storage vessel. Air will be displaced from the storage tank as the preservative is returned.

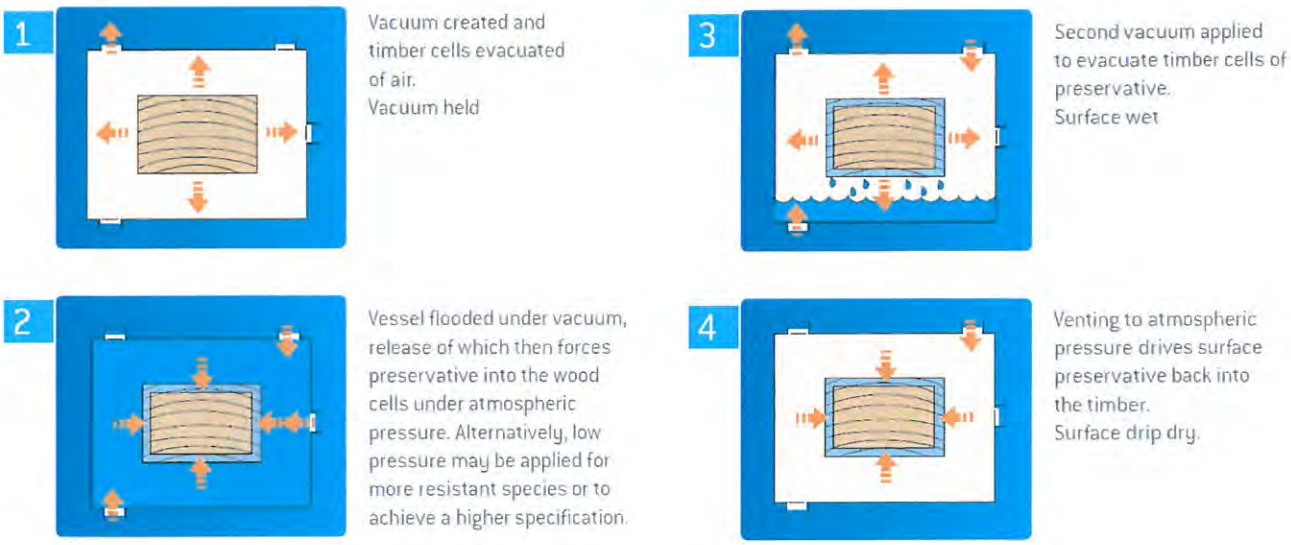
vii. A final vacuum is then applied to remove excess preservative from the timber. Emissions will be air and water vapour. Emission monitoring shows negligible release of other components. (See diagram 3 below)

viii. Vacuum is released and atmospheric pressure drives surface preservative back into the timber. Any recovered preservative is returned back to the operational storage vessel. (At this stage the timber is generally drip dry as noted in diagram 4 below)

ix. Process controls including door interlocks prevent the treatment vessel from opening prior to completion of the treatment cycle.

x. Treated timber is removed from the treatment vessel and held on the bogies to ensure fully drip dry.

Schematic of the Vacsol treatment process



2.1.5 Drying process

The treatment area which consists of the treatment vessels, operating storage vessels, associated pipework, bogies and rails (post treatment drying area) is under cover and protected from the elements.

The treatment area has a concrete impermeable surface, spill containment kerbs, sealed construction joints and a bunded exterior to contain treatment solution in the unlikely event of failure of any part of the treatment plant. The condition of the impervious surface is checked at least once per week and any requirement for cleaning or maintenance is recorded.

In accordance with guidance SG11, spacers are used at set intervals to ensure that there is free movement of air during drying and to minimise capillary retention between surfaces and hence facilitate rapid (and complete) drying.

After processing, timber is stored within the treatment plant building on the bogies and rails for a minimum of 5 minutes until drip free and defined as dry.

To be defined as dry the timber does not form drips (Checked by the operator).

Post treated timber that is dry is removed from the installation to a point of storage prior to despatch or component assembly, dependent on requirements. No timber is exported until deemed dry by the treatment operator.

A number of photographs of the installation are included in Appendix 3.

2.2 Process vessel cleaning

Water used to clean the pressure vessels is collected and re-used into the process. No waste water is exported off site.

2.3 Raw materials

The operator uses only one treatment chemical, and therefore can control the specification of that material precisely. Timber products to be treated are of known specification in terms of types of timber, dimensions etc. The environmental consequence of use of the raw materials are therefore well understood. Kingspan Timber Solutions Ltd. undertake periodic review of alternative raw materials with regard to environmental impact, in order to reduce environmental impact. Currently the VACSOL product in use is considered the most appropriate.

A programme to monitor and record the consumption of preservative against treated timber product produced is in place. This data helps to optimise raw material use and reduce the amount of preservative consumed.

Details of raw material use are available on request but should be considered to be commercially sensitive.

Raw material	Use /annum
Timber (cubic metres)	Commercially Sensitive data - Available on request
Treatment chemical (litres)	Commercially Sensitive data - Available on request
Water (cubic metres)	Commercially Sensitive data - Available on request

There should be no releases to water or land from the treatment process as the VACSOL treatment plant operations are designed by Lonza Wood Protection on a total containment basis.

Auto-Treater - **Lonza Wood Protection's, timber treatment and management control system for the** timber treatment plant closely monitors the operation of the plant and should a deviation occur the system will shut the plant down and go into alarm mode. Once in an alarm mode the plant will not restart without operator intervention to investigate the problem, clear the alarm and then restart the process once satisfied it is safe to do so.

3 Emissions

3.1 Air

3.1.1 Releases to air

VACSOL Aqua wood preservative is typically used as a 10% w/v working solution in water. The high percentage of water combined with the special formulation of the product means that releases to atmosphere are negligible.

The main release points are the vacuum pump(s) exhaust via the service liquid tank vents, giving displacement of air with an initial high flow rate from the treatment vessel containing some water vapour and trace amounts of product components.

The daily emissions monitoring form for the treatment plant installation includes the name of the employee undertaking the monitoring, date, emissions / odour status, any comments or conditions and confirmation that any adverse findings have been reported and to whom

In practice site operation is such that monitoring of the plant is likely to be more frequent due to high site occupation levels and movements around the site by staff.

3.1.2 Fugitive emissions to air

Release monitoring to air is not undertaken at any timber treatment sites in the UK and the dilute water based preservative in use does not pose a risk to the environment in terms of atmospheric release. Therefore there should be no requirement for release monitoring on this site.

Fugitive emissions from treated timber packs during drying are negligible.

The main pollutants to atmosphere liable to be released from the site, either intentionally or unintentionally, are wood dust from the processing of timber, the extraction of wood dust to the arrestment plant and the final disposal of the wood dust as well as odour from the treatment plant, all of which are regulated under a separate Part B permit.

The only possible fugitive emissions to air that are of concern are odours arising from treatment activity and these are unlikely to be significant. There are no known complaints of odour from the site. Odour emissions are likely to be caused principally by the organic fugitive emissions.

Vacsol Aqua does not contain VOC materials (as defined) and therefore there is no need to carry out solvent management planning. .

3.2 Releases to surface water and sewer

The undercover treatment containment area / bund contains the treatment and operating storage vessels (for the Vacsol Aqua), bogies and rails, all of which are therefore protected from the elements. After processing, timber is stored within the treatment plant building for a minimum of 5 minutes until drip free and defined as dry. When dry the timber is removed from the installation to a point of storage prior to despatch or component assembly.

The kerbed containment area is designed to ensure any preservative dripping from the treatment process or from freshly treated timber is safely contained and then recovered.

There are no emissions to water or sewer from the installation.

3.2.1 Point source emissions to groundwater

There are no point source emissions of List I and List II substances as defined by the Water Framework Directive to groundwater.

3.2.2 Discharge Consent PRCNF00364

The site has discharge consent for surface water discharges from roofs and yard areas. The consent documents are issued by Anglian Water and the Environment Agency under reference PRCNF00364. The documents are is included in the application as a separate document.

3.3 Waste minimisation

There are 3 areas of potential waste generation:-.

- Waste liquids associated with the treatment process
- Waste treated timber generated through the manufacturing and treatment processes
- General waste associated with maintenance and cleaning of the treatment plant

The nature of the process means that there are very few wastes generated.

Vacsol Aqua product is delivered in ready to use form i.e. is pre-mixed, by bulk tanker deliveries straight into the site bunded storage tank avoiding the wastes associated with mixing on site and concentrate packaging materials i.e. Intermediate Bulk Containers.

Treatment chemicals are consumed during the treatment process. Any surplus chemical, which is not absorbed into the timber, is collected within the treatment vessel and automatically returned to the operating storage tanks for reuse within the next cycle, thus preventing waste.

The manufacturing and treatment process avoids treating waste timber. All timbers are processed to size and length prior to treatment.

Processed timber is loaded onto bearers on the treatment plant bogies and secured into position (with reusable straps). Careful handling minimises the possibility of damage and therefore avoids reject timbers.

Timber rejected due to insufficient treatment is identified through quality control and is reprocessed.

General wastes associated with maintenance and cleaning are minimal and are removed from site by maintenance contractors.

Waste audits are carried out periodically and will be carried out within 18 months of issue of the permit.

Raw materials usage is recorded in order to establish internal benchmarks and compared against m3 of timber product leaving the site to monitor and improve efficiency. This data is considered commercially confidential and as such will only be available to the regulator upon request. As there are no waste streams associated with the activity, waste cannot be monitored. A formal confidentiality request has been submitted as part of this application (see Appendix 4).

3.3.1 Waste handling

Kingspan Timber Solutions Ltd.:

- Have identified the disposal routes for all waste for the site (including the installation).
- Segregate the main waste types on a site wide basis to ensure maximum recycling potential.
- Have waste storage areas / containers clearly marked and labelled which keep incompatible waste types separate.
- Have suitable storage facilities for substances that are flammable, sensitive to heat or light etc,
- Routinely check and deal with damaged or leaking waste containers.

Kingspan Timber Solutions Ltd. produce a register of the quantity, nature, frequency and details of the registered waste carrier for any waste which is disposed of or recycled. There are no significant wastes arising from the installation other than water used for cleaning. (see 3.3.3 below)

3.3.2 Waste re-use, recovery, recycling or disposal

Waste streams associated with the installation are relatively small and comprise the following:

Liquid wastes – there are no liquid wastes as a matter of routine. Should a spillage occur inside the bunded area, liquid wastes are likely to be collected in the sump areas. Liquid wastes can be pumped out and disposed of using suitably licensed waste contractors.

Solid wastes – Solid wastes are very low:-

- Reusable webbing buckle straps secure timber to the bogies during the process so as to avoid creating strapping waste materials.
- Timber is cut prior to treating to reduce treatment fluid waste.
- Timber bearers used on the bogies are re-used.
- Any waste products are placed into designated skips.

Every year Kingspan Timber Solutions Ltd. will review their options for dealing with the above waste streams, to ensure the best environmental options are utilised.

Kingspan Timber Solutions Ltd. will investigate potential markets for the recovery / re-use of wastes that are currently disposed of to landfill, at least every 2 years.

3.3.3 Water use

Vacsol Aqua Ready to use (RTU) solution is provided to Kingspan Timber Solutions Ltd. in bulk tanker deliveries. This avoids the requirement to site mix the treatment solution where water would be required. A minimal amount of water is used to top up the coolant and vacuum sealing system and is normally that used for cleaning the system..

A review of water use will be conducted within 24 months of the issue of the first PPC permit, in accordance with the requirement of SG11 to see whether there are potential options to further reduce water usage for example harvesting of rainwater from the building roof for use in the process. The findings of this review to be used as a baseline for future benchmarking.

3.3.4 Waste Registrations and exemptions

The site benefits from an Environment Agency registration ref: CB/FM3982YH, and a waste exemption ref: EPR/VF0832FG/A001.

3.4 Management

3.4.1 Environmental management system

The site has an ISO 14001 accredited Environmental Management System in place (see Appendix 5). The EMS was last audited on 24/09/2014. The latest Risk Assessment for Local Air Pollution Control Environmental Impact Appraisal was undertaken by Dave Bass at Huntingdonshire District Council dated 04/12/2014, the findings of which concluded that Kingspan Timber Solutions Ltd is a low risk installation.

3.4.2 Operations and maintenance

The site has a managed programme for maintenance of key pieces of plant (as noted in table in section 2.1.3)

For equipment referred to above:

- Alarms or other warning systems are in place, which indicate equipment malfunction or breakdown;
- Warning systems are maintained and checked to ensure continued correct operation, in accordance with the manufacturer's recommendations;
- Essential spares and consumables for such equipment are readily available from suppliers, so that plant breakdown can be rectified rapidly.

Records of routine maintenance and breakdowns are kept and analysed by the Kingspan Timber Solutions Ltd. in order to eliminate common failure modes.

3.4.3 Competence and training

A competent person(s) has been appointed to liaise with the regulator and the public with regard to complaints. This person(s) is:

Name: Martin Waker

Telephone: 01767 676400

Address: Kingspan Timber Solutions Ltd. Eltisley Road, Great Gransden, Sandy, Bedfordshire SG19 3AR

A formal structure showing the extent of each level of employee's responsibility with regard to the control of the process and its environmental impacts is displayed within the installation building.

Staff at all levels shall receive the necessary training and instruction to enable them to comply with the conditions of the permit. Staff training records shall be kept of relevant training undertaken and are available to the regulator on request.

The potential environmental risks posed by the work of contractors will be assessed whenever applicable and instructions provided to contractors about protecting the environment while working on site.

3.4.4 Accidents/incidents/non-conformance

Where non-compliance or an environmental incident takes place, Kingspan Timber Solutions Ltd. will deal with the issue in accordance with written procedures (where they exist).

Written procedures exist for the following incidents:

- Complaint from members of the public
- Environmental incident affecting on-site only
- Environmental incident affecting off-site.

In the event of an environmental incident occurring off-site, the regulator will be notified as soon as practicable.

Copies of the above procedures are available upon request.

3.5 Energy

3.5.1 Basic energy efficiency requirements

It is noted that there is a requirement to produce a report annually on the energy consumption of the installation. Kingspan Timber Solutions Ltd. do not currently monitor energy specifically for the installation as there is no individually metered power supply to the treatment plant. Given the relatively low energy use it is not anticipated that such works would be necessary.

It is also a requirement that Kingspan Timber Solutions Ltd. should evaluate energy flows and target areas for reduction which should be updated annually. However, energy use within the installation is relatively low.

The main energy requirements are from pumps and motors.

SG11 notes that ongoing demonstration of BAT for energy use is anticipated to be demonstrated via:-

- Ensuring pumps selected are the lowest energy pumps available and that they are operated in a way which minimises energy costs.
- The treatment plants are controlled so that pumps only run when required, once a set point is reached the pump(s) stop and only restart as required to get the process back to set point. This applies to the vacuum and pressure pumps in particular.

Preventative maintenance programmes for plant and equipment will also help prevent wastage of energy.

The total electrical demand for the installation is shown as a screening assessment in Appendix 6. It should be noted that the energy use for the installation is considered commercially confidential for the reasons laid out in Appendix 4. Appendix 6 is therefore provided separately from this core document and is intended to be withheld from the public register.

3.6 Noise and vibration

The installation is over 100m from the nearest sensitive receptor and there are a number of intervening buildings on site. A subjective evaluation of the plant within the installation has noted that the sound is characterised by humming and whirring of pumps which only produce low levels of sound. The pumps are housed within a semi – enclosed building and there are additional buildings located between the installation and this receptor. There is therefore unlikely to be any cause for concerns relating to noise and as such there are no requirements for further control.

A secondary potential sound source is the use of a loader. The fork lift loader has a diesel engine and reversing alarm. The device is only used within the installation when loading and unloading timber for treating and is not audible beyond the site boundary. The likelihood of an adverse noise impact from the installation is considered low.

There are no known noise complaints regarding the operation of the treatment plant, which appears to endorse the subjective evaluation carried out.

No formal BS4142:20104 assessment is considered necessary.

In the unlikely event that a complaint occurs associated with the installation, a full noise survey can be carried out to establish the cause of any problems.

3.7 Site report and remediation

The site has been in the ownership of Kingspan Timber Solutions Ltd. since 2006 when Kingspan acquired Potton Limited. Potton Limited owned the site and operated a timber frame manufacturing business including timber treatment from the early 1970's. Kingspan Timber Solutions Ltd. therefore have liability for historic contamination. A screening assessment has been carried out by Ian Farmer Associates and is submitted as a separate document under reference 21398 Part A2 assessment.

The site is covered in concrete hardstanding and is bunded. The risk of contamination from current activities is considered negligible. Ongoing compliance will be demonstrated by ensuring the integrity of (and maintaining) the bunded area, and by prompt action to deal with any spillage.

Site remediation and clean-up will comprise careful cleaning of the concreted areas, and dismantling and removal of treatment equipment in line with manufacturer's instructions.

3.7.1 Prevention

The following measures are in place to prevent potential contamination:-

- The site has a concreted surface, and is considered impervious.

- Drains within the installation have been sealed to prevented liquid egress in the event of a spillage.
- The bund area has been designated to contain spillages and has a large sump in the event of a storage tank spillage.
- The sump is capable of holding >110% of the volume of the largest storage vessel.
- The treated timber is removed from the treatment vessel only when valuable treatment liquor has stopped dripping from it. Once removed, the timber stands within the bunded area until drip free and defined as dry.
- Visual inspection of the installation concrete surface shows no evidence of staining, and this indicates that there is adequate control of the chemical.

In addition, the condition of the concreted area is inspected for signs of damage. Where damage is noted, that could result in a loss of the impervious barrier, timely repairs will be carried out.

3.8 Ecology and SSSI

The installation is not within 2km of any designated Site of Special Scientific Interest.

See Designated SSSI screening in Appendix 7.

Visual inspection and ongoing observation of the treatment facility did not note any flora or fauna present. It is considered that the small size of the installation and lack of suitable habitat effectively makes formal ecological assessment unnecessary. The general provisions of the Wildlife and Countryside Act and Habitats Regulations offer sufficient control in the event of protected flora and fauna arising on the site.

4 Further Information

The following further information may help inform the application:

- Safety Data Sheet for VACSOL Aqua 6112 RTU
- VACSOL Aqua Treatment User Guide
- ARCH VACSOL Aqua Treated Timber & Plywood Code of Practice (COP 30 Issued November 2008)
- VACSOL Family. Low pressure treated timber Specifier's Guide
- Part A2 baseline screening assessment (Ian Farmer Associates)

Appendices

Appendix 1: Site Plans

- 1.1 Site Location Plan
- 1.2 Site Layout Plan
- 1.3 Installation Boundary and drainage plan

Appendix 2: Treatment Plant schematic diagrams

- 2.1 Treatment Plant schematic diagram Plant 1
- 2.2 Treatment Plant schematic diagram Plant 2

Appendix 3: Installation Photographs

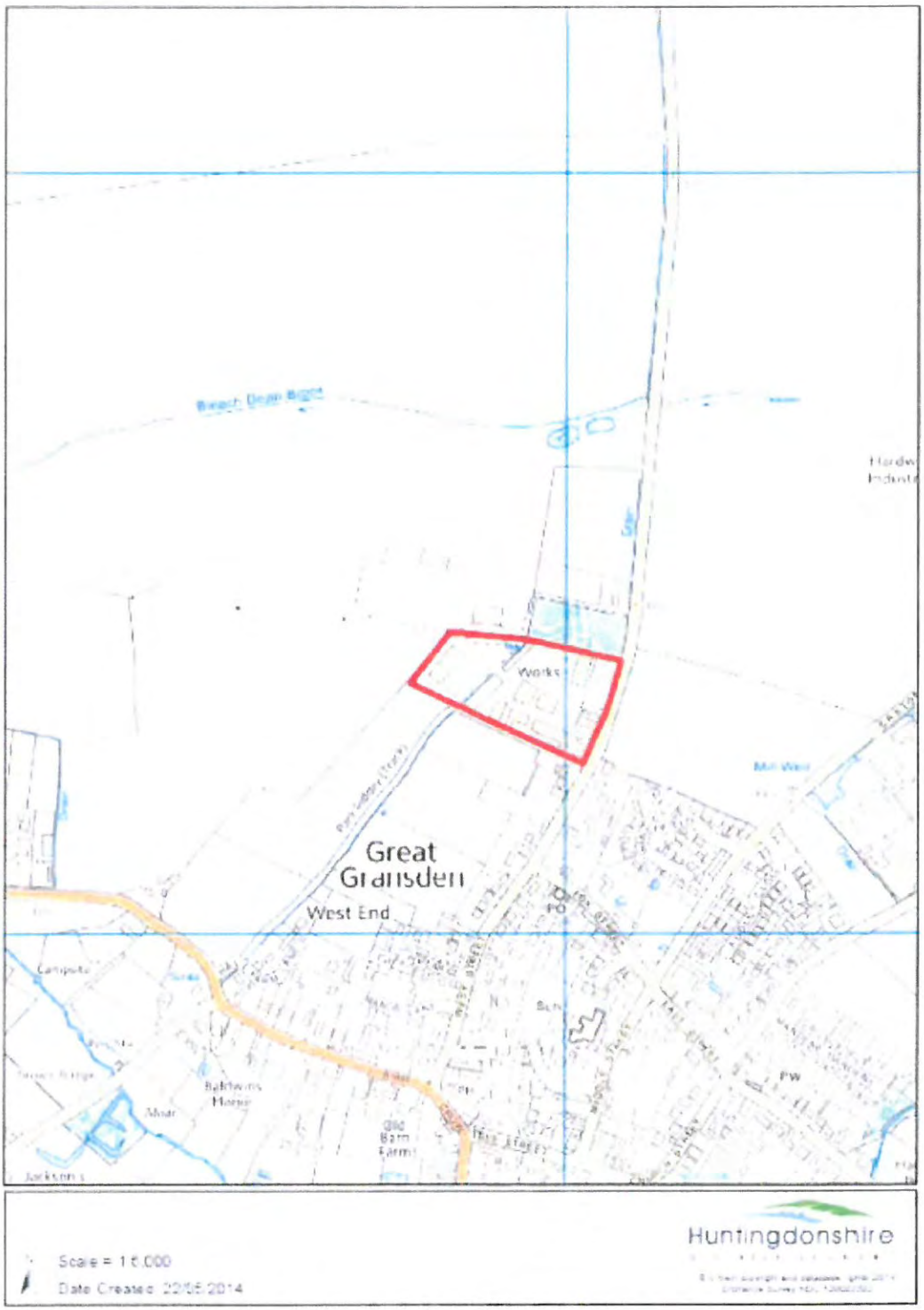
Appendix 4: Application for commercial confidentiality

Appendix 5: Environmental Management System Accreditation Certificate

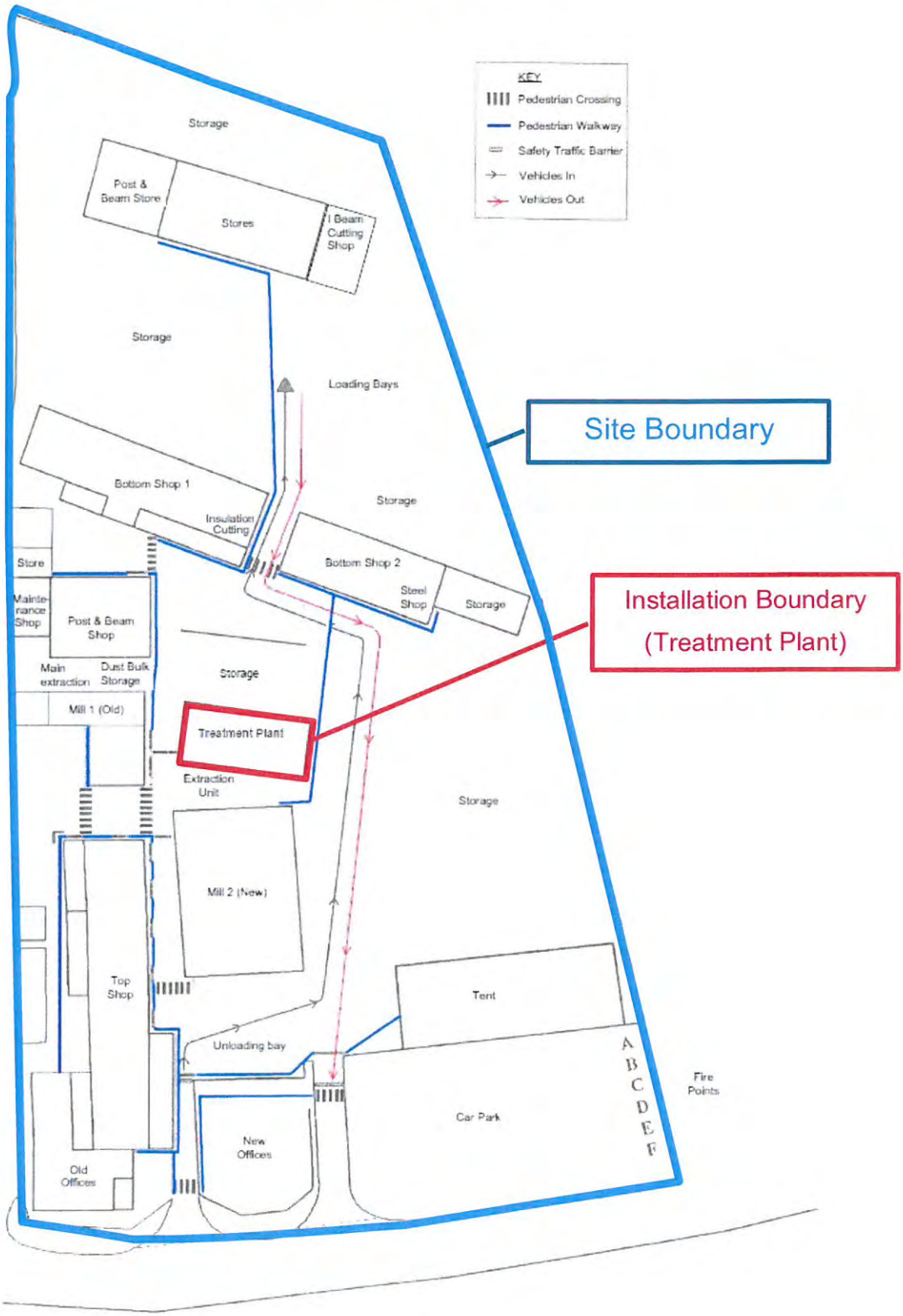
Appendix 6 : *Electricity consumption (provided separately see Section 3.5)*

Appendix 7 : Designated SSSI screening

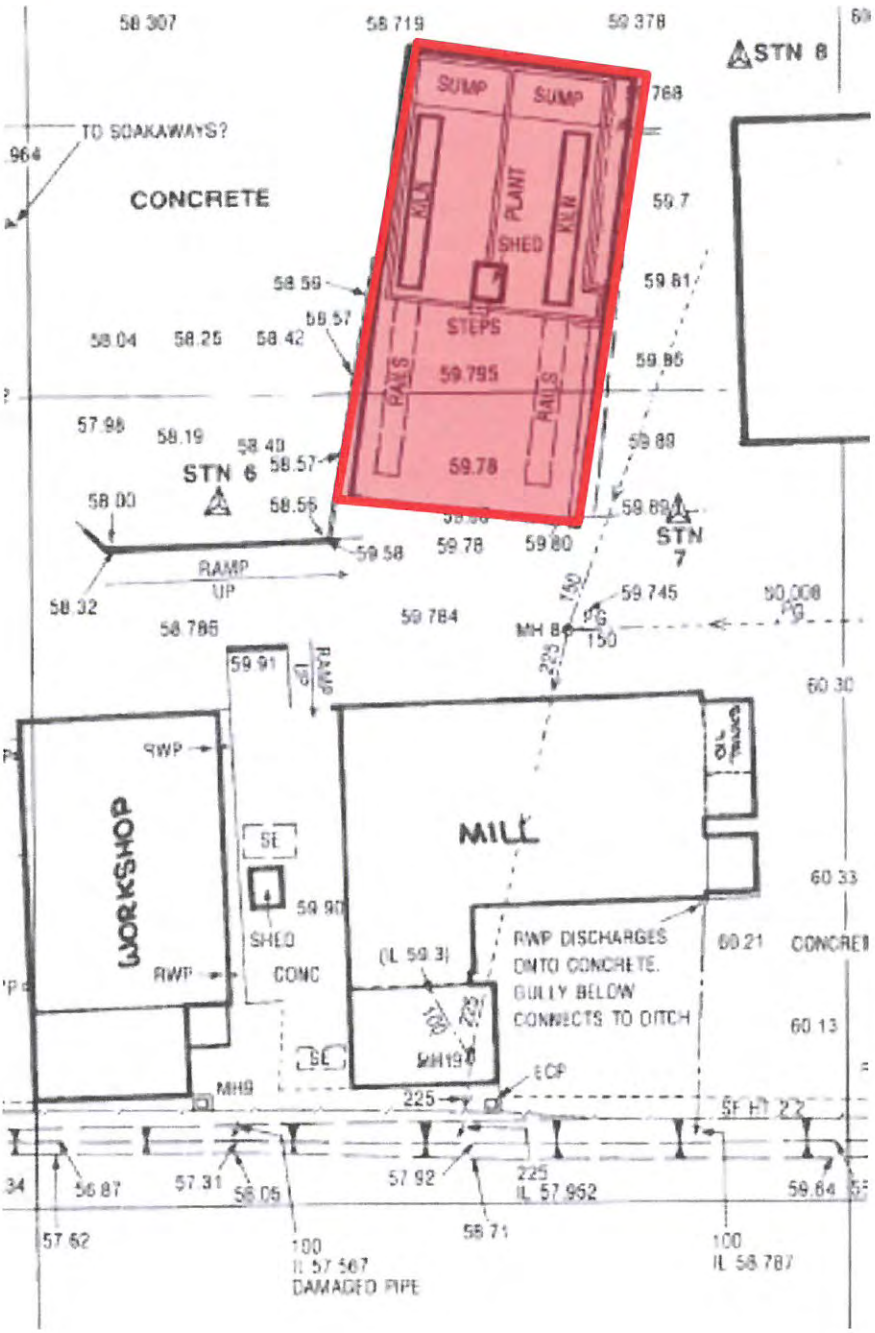
Appendix 1 – 1.1 - Site Location Plan



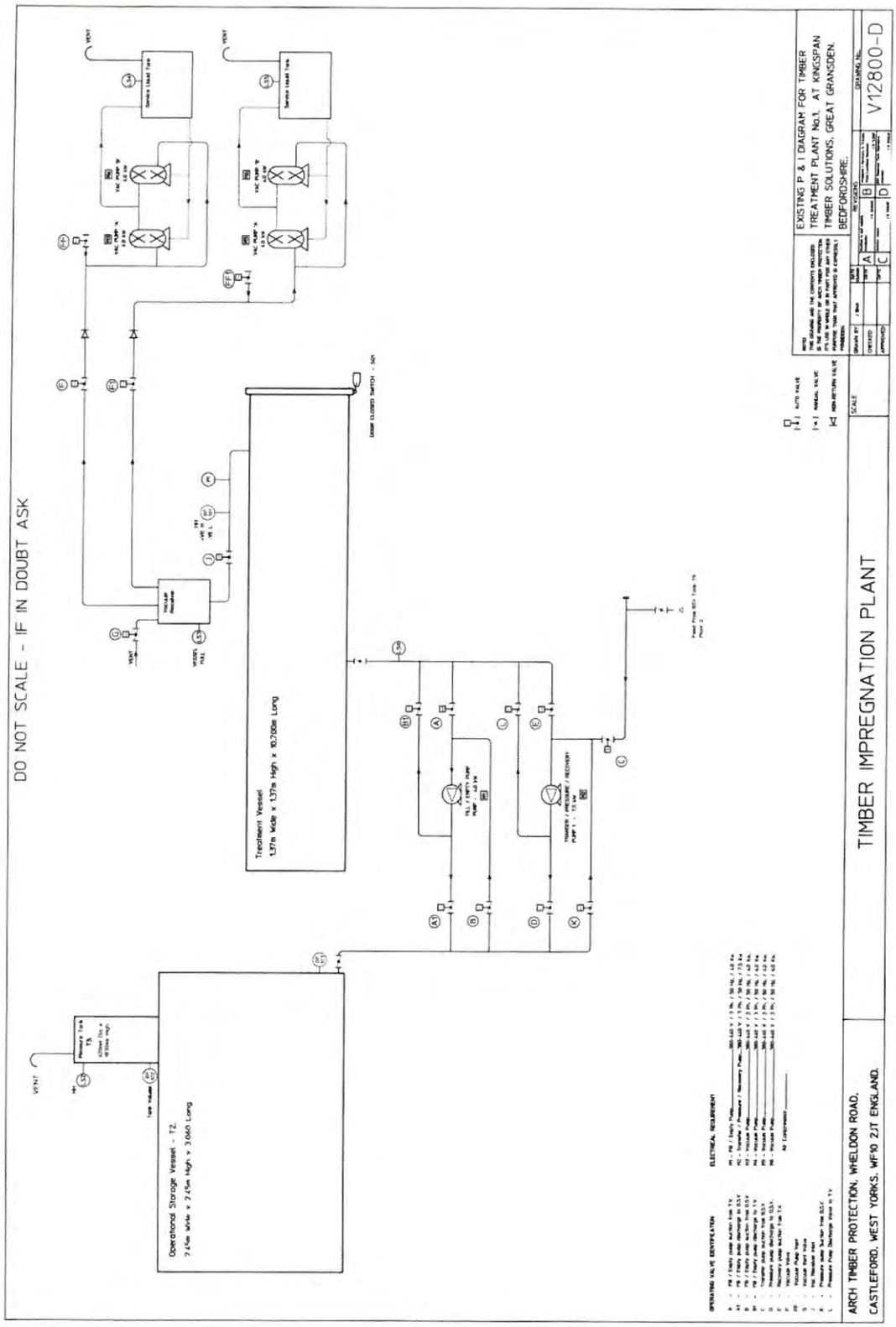
Appendix 1 – 1.2 - Site Layout Plan



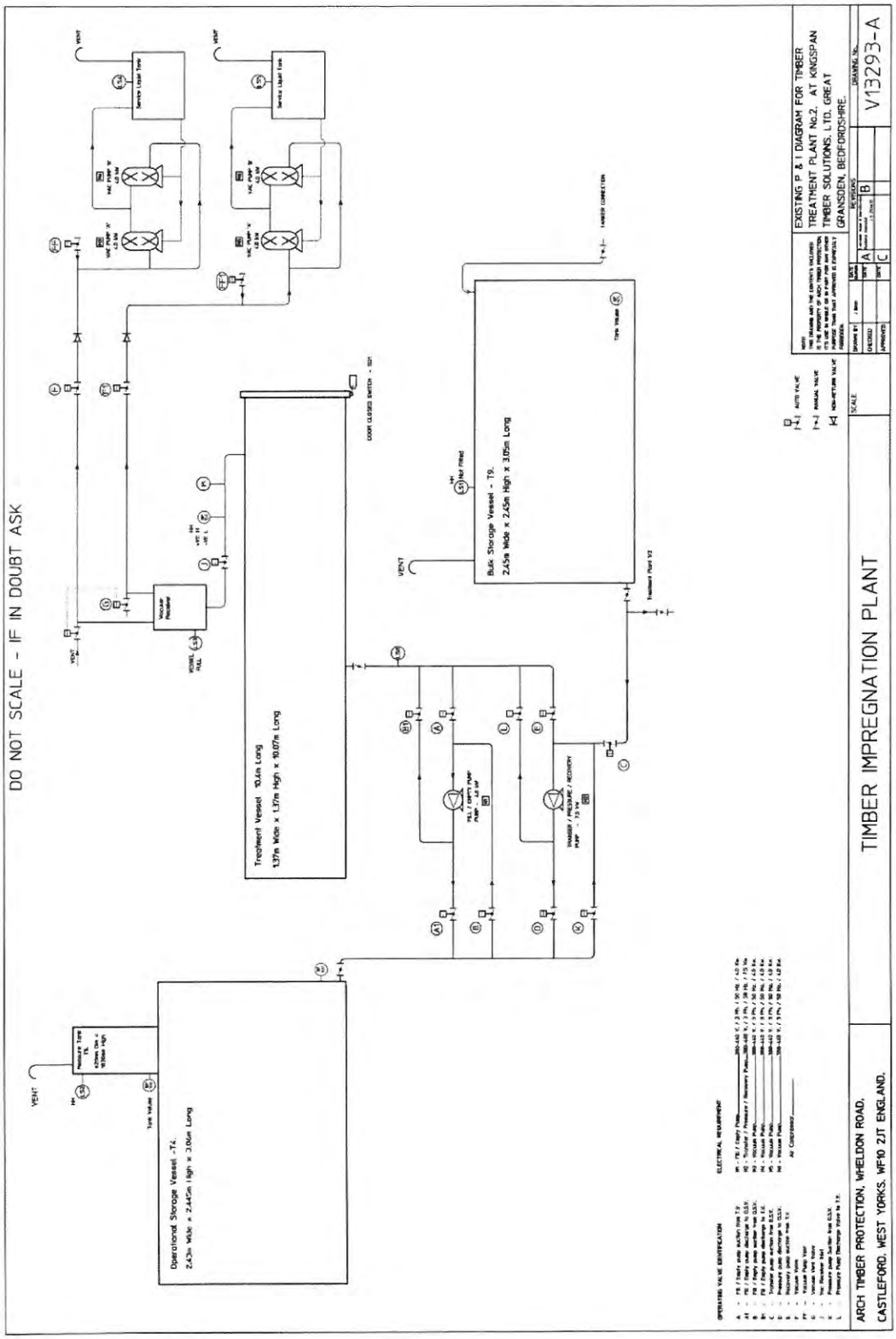
Appendix 1 – 1.3 – Installation Drainage



Appendix 2 – 2.1 - Timber Impregnation Plant Schematic 'Treatment Plant No. 1'



Appendix 2 – 2.2 - Timber Impregnation Plant Schematic ‘Treatment Plant No. 2’



Appendix 3 Installation photographs

Vacsol delivery (inside bunded area)

Bogie rails showing entry to treatment vessel (no significant staining)

Bogie loaded ready for insertion into treatment vessel

Bund at front of treatment area

Loaded bogie about to be placed in treatment vessel

Appendix 4 – Application for commercial confidentiality

Formal Notice Regulation 48(1)(b) commercially confidential materials

The applicant hereby gives notice that the information listed below is considered to be confidential on the grounds that, if released, it could provide information of use to competitors, enabling them to calculate the unit cost of products and services offered by the company.

The information to be excluded is as follows:

- Quantities of raw materials consumed (and any measurements or calculations required to determine key performance indicators therefrom)
- Quantities of waste materials produced (and any measurements or calculations required to determine key performance indicators therefrom)
- Details of energy consumption (and any measurements or calculations required to determine key performance indicators therefrom).

The financial prejudice incurred will, in the view of the applicant, outweigh the need to publicise the data, which is not of significant use to the public as it relates only to quantities and volumes of materials and does not significantly impact on emissions. Emissions and pollution issues are regulated by conditions on the permit which would be audited by the regulator annually providing appropriate comfort to interested parties that BAT requirements are complied with. Environmental performance is not therefore compromised by provision or otherwise of the information.

The applicant proposes to hold the information on site available for inspection at any reasonable time, or is happy to provide a summary of such information (not for inclusion on the public register) as required.

The applicant therefore formally requests withholding the information above from the public register.

Signed  Date 10/6/15

Martin Waker (on behalf of the applicant)

Appendix 5 – Environmental Management System Certificate

LPCB®

www.redbooklive.com

Certificate of Management System Registration

Certificate Number: 388-8EMS Issue: 01

Kingspan Timber Solutions Limited

having complied with the requirements of:

ISO 14001:2004
Environmental Management Systems - Requirements with guidance for use

are authorised to use the LPCB Certification Mark on stationery and publications related to the following products and/or services

Kingspan Timber Solutions Limited
Eltisley Road
Great Gransden
Sandy
Bedfordshire
SG19 3AR
UK

Scope:
Design, manufacture and supply of timber frame and timber based buildings

This certificate is maintained and held in force through regular surveillance activity

Tracie Hunte 28 October 2013 16 May 2016 28 October 2013

LPCB UKAS MANAGEMENT SYSTEMS 007

bre

Appendix 6 – Electricity Consumption

Provided separately (see Section 3.5).

Appendix 7 – Designated SSSI screening

Source: https://designatedsites.naturalengland.org.uk/SiteSearch.aspx

KINGSPAN TIMBER SOLUTIONS

ELTISLEY ROAD
GREAT GRANSDEN SG19 3AR

PART A2 BASELINE ASSESSMENT

Contract: 21398

Date: MAY 2015

Ian Farmer Associates (1998) Limited
1 Fairfield Court, Seven Stars Industrial Estate,
Wheler Road, Coventry, CV3 4LJ
Telephone: 024 7630 3422
Email: coventry@ianfarmer.co.uk