

Application for a variation of permit conditions

Local Authority Pollution Prevention and Control
Pollution Prevention and Control Act, 1999
Environmental Permitting (England and Wales) Regulations 2013

Introduction

When to use this form

This environmental permitting regime is known as and referred to as Local Authority Pollution Prevention and Control ('LAPPC'). Installations permitted under this regime are known as Part 'B' installations. Use this form if you already have a permit and wish to vary the permit conditions or wish to make a change to your installation.

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, republished in March 2010 and available at <http://www.defra.gov.uk/environment/quality/pollution/ppc/localauth/pubs/guidance/manuals.htm>. 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 Process Guidance note. The EP Regulations can be obtained from The Office of Public Sector Information, or viewed on their website at http://www.opsi.gov.uk/legislation/about_legislation.htm.

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 variation application to enable it to be processed further. When complete return to *Public Protection, Shropshire Council, Shirehall, Abbey Foregate, Shrewsbury, SY2 6ND*

Other documents you may need to submit

There are number of other documents you may need to send us with your variation application. Each time a request for a document is made in the 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 your permit reference number and the name of the installation.

Using continuation sheets

In the case of the questions on the 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 - not relevant for e-applications

Please send the original and 3 copies of the form and all other supporting material, to assist the Authority in conducting any necessary consultation process.

If you need help and advice

We have made the form as straightforward as possible, but please get in touch with us at the local authority address given above if you need any advice on how to set out the information we need.

A1 Applicant details

A1.1 Name of the installation

UNVENTED PICKLING PLANT

A1.2 Please give the address of the site of the installation

GRANGE ROAD, ELLESMERE, SHROPSHIRE

Postcode SY12 9DG

Telephone 01691 627200

A1.3 Permit reference number

EPR B103/01

A2.1 The Operator – Please provide the full name of company or corporate body

FABDEC LTD

Trading/business name (if different)

Registered Office address

GRANGE ROAD,

ELLESMERE,

SHROPSHIRE

Postcode: SY12 9DG.

Principal Office address (if different)

Postcode:

Company registration number

A3.1 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 can be an agent or consultant.

Name ALLAN MCFARLANE

Position OPERATIONS MANAGER

Address FABDEC LTD, GRANGE ROAD, ELLESMERE,
SHROPSHIRE

Postcode SY12 9DG

Telephone number 01691 627200

Fax number _____

email address allan.mcfarlane@fabdec.com

B1 About the installation

Please fill in the table below with details of all the current activities and proposed activities at the whole installation.

In Column 1, Box A, Activities in the stationary technical unit

Please identify all activities listed in Schedule 1 to the EP Regulations that are carried out in the stationary technical unit of the installation.

In Column 1, Box A(i), Proposed new activities in the stationary technical unit

Please identify all activities listed in Schedule 1 to the EP Regulations that are proposed to be carried out in the stationary technical unit of the installation.

In Column 1, Box B, Directly associated activities

Please identify any directly associated activities that are carried out on the same site which:

- * have a technical connection with the activities in the stationary technical unit
- * could have an effect on pollution.

In Column 1, Box B(i), Directly associated activities

Please identify any directly associated activities that are proposed, to be carried out on the same site which:

- * have a technical connection with the activities in the stationary technical unit
- * could have an effect on pollution

In **Column 2, Both Boxes A and B**, please quote the Chapter number, Section number, then paragraph and sub-paragraph number as shown in Part 2 of Schedule 1 to the EP Regulations [For example, *Manufacturing glass and glass fibre where the use of lead or any lead compound is involved*, would be listed as Chapter 3, Section 3.3, Part B(b)].

B1.1 Installation table for variation of permit conditions

COLUMN 1	COLUMN 2
Box A Activities in the Stationary Technical Unit	Section in Schedule 1 of the EP Regulations
Use of di-isocyanates	Section 4.1 Part B
Box A(i) Proposed new activities in the Stationary Technical Unit	Section in Schedule 1 of the EP Regulations
Surface treatment of metal – releasing NO_x	Section 2.3 Part B
Box B Directly associated activities	Section in Schedule 1 of the EP Regulations
Surface cleaning with volatile organic solvents	Reg 2 EPR as amended in 2013 refers to Industrial Emissions Directive Annex VII Parts 1 and 2
Box B(i) Proposed new directly associated activities	Section in Schedule 1 of the EP Regulations

B1.2 Why is the variation application being made?

specific permit conditions will require amending

~~we are unsure whether the proposed changes will require a variation and wish the local authority to advise on this~~

B.1.3 Site Maps

Please provide:-

* A suitable map showing the location of the installation clearly defining extent of the installations in red and indicating the extent of the installation affected by the proposed change

Doc Reference **EPR B103/01/A1 Current permit installation boundary Plan**

* A suitable plan showing the layout of activities on the site, including bulk storage of materials, waste storage areas and any external emission points to atmosphere, indicating which activities will be affected by the proposed change

Doc Reference **EPR B103/01/A2 Emission point S1 marked on current permit site plan**

* A suitable plan showing the site drainage system and all discharge points to drainage or water courses indicating which will be affected by the proposed change

Doc Reference )

B2 The Installation

Please provide written information about the aspects of your installation listed below. We need this information to determine whether you will operate the installation in a way in which all the environmental requirements of the EP Regulations are met.

B2.1 Describe the proposed change to the installation and activities and identify the foreseeable emissions to air from effecting this change (this will include any foreseeable emissions during start up, shut down and any breakdown/abnormal operation)

The use of process flow diagrams may aid to simplify the operations

Doc Reference: EPR 8103/01/A3

B2.2 Once all foreseeable changes in emissions as a result of the proposed change have been identified each emission should be characterised (including odour) and quantified.

Atmospheric emissions should be categorised under the following

- i. point source, (e.g. chimney / vent, identified by a number and detailed on a plan)
- ii. fugitive source (e.g. from stockpiles / storage areas).

Doc Reference: EPR 8103/01/A4

B2.3 For each emission which will be affected by the proposed change describe the current and proposed technology and other techniques for preventing or, where that is not practicable reducing the emissions.

Doc Reference: EPR B103/01/A5

B2.4 Describe the proposed measures for additional monitoring of all identified emissions as a result of the proposed change.

Doc Reference: EPR B103/01/A6

B2.5 Describe the effect the proposed change will have on your environmental management techniques, in relation to the installation activities described.

Doc Reference: _____

B2.6 Detail in the table provided below, or on an additional sheet if preferred, the exact conditions you wish to change in your current permit.

Permit condition reference	Proposed new wording of condition

B2.7 Additional information

Please supply any additional information which you would like us to take account of in considering this variation application.

Doc Reference _____

C1 Fees and Charges

Your application cannot be processed unless the correct fee is enclosed.

C1.1 Please state the amount enclosed as a fee for this variation application.

£1579 (cheques should be made payable to Shropshire Council)

We will confirm receipt of this fee when we write to you acknowledging your variation application.

C1.2 Please give any company purchase order number or other reference you wish to be used in relation to this fee.

C2 Annual charges

The application or granting of a permit variation will not affect the level of your annual subsistence charge, nor the requirement to pay it.

C3 Commercial confidentiality

C3.1 Is there any information in the application for a variation that you wish to justify being kept from the public register on the grounds of commercial confidentiality?

No

Yes

Please provide full justification, considering the definition of commercial confidentiality within the EP Regulations.

Doc Reference _____

C3.2 Is there any information in the application for a variation that you believe should be kept from the public register on the grounds of national security?

No

Yes

Do not write anything about this information on the form. Please provide full details on separate sheets, plus provide a copy of the variation application form to the Secretary of State/Welsh Ministers for a Direction on the issue of National Security.

C4 Data Protection

The information you give will be used by the Local Authority to determine your application for a variation. 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.

It is an offence under Regulation 38 of the EP Regulations, for the purpose of obtaining a variation to 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.

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).

C5 Declaration: previous offences (delete whichever is inapplicable)

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 AJ McFarlane.

Name AJ MCFARLANE

Position OPERATIONS MANAGER.

Date 13-4-17.

C6 Declaration

C6.1 Signature of current operator(s)*

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 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.

For the application from:

Installation name: UNVENTED PICKLING MACHINE

Signature AJ McFarlane

Name AJ MCFARLANE

Position OPERATION MANAGER.

Date 13-4-17.

Signature _____

Name _____

Position _____

Date _____

** Where more than one person is defined as the operator, all should sign. Where a company or other body corporate – an authorised person should sign and provide evidence of authority from the board of the company or body corporate.*



B 2.1 Unvented Pickle Plant

Plant Function

The function of the plant is to acid pickle the inside of a stainless steel unvented water tank and to then rinse off any acid residue before the tank moves to the next stage of the production process. This process is required as the corrosion resistance of the steel will have been significantly degraded by the previous welding operations. Acid pickling removes the oxide layer established during welding and restores the corrosion resistance level back to that of the original steel.

Plant Description

The main part of the pickling chamber consists of a rotating drum that is divided into 4 quadrants. This drum is contained within a sealed polypropylene enclosure so that no acid or rinse water can escape into the environment. Each quadrant can hold 2 or 3 tanks for pickling dependent on size. Tanks are secured into each quadrant and filling hoses connected.



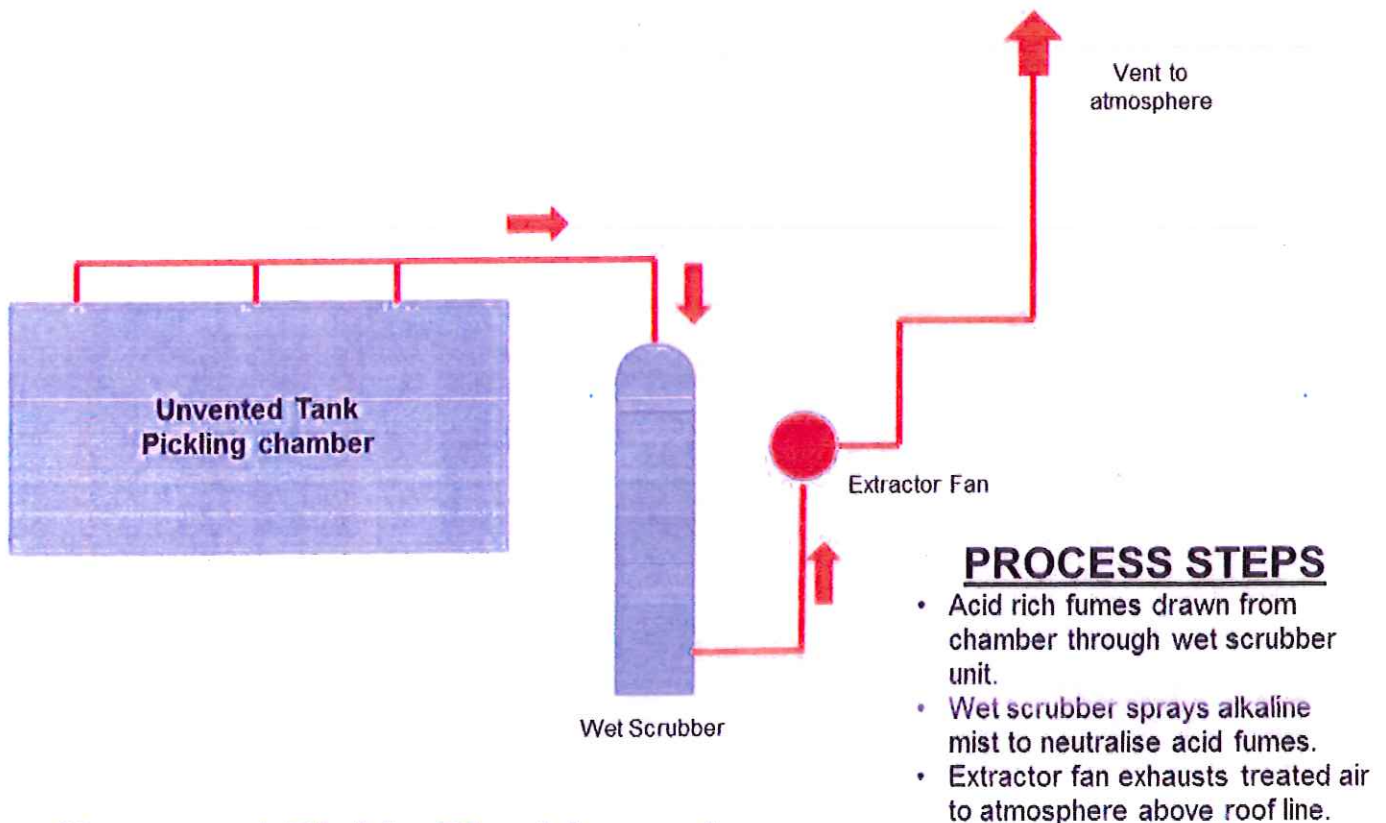


Once the chamber door is closed, the drum rotates and acid is sprayed into each tank for 5 seconds, every 30 seconds for 20 minutes. The stainless steel tanks are not sealed and the acid is allowed to drain into the sump of chamber where it is pumped back into the acid holding tank. The acid thoroughly coats the inside of each tank and removes the oxide layer.

After 20 minutes the acid is replaced by fresh water and the process repeated to remove any acid residue. The acid contaminated water is pumped to the water treatment plant where it is neutralized and the metallic oxides removed.

Throughout the operation, the air extraction system is drawing any acid rich fumes through the wet scrubber before exhausting to atmosphere above the building ridge line.

Basic line diagram of air extraction system



Unvented Pickle Plant Layout

Registered Number: 675981 England

Doc Ref : EPR B103/01/A3



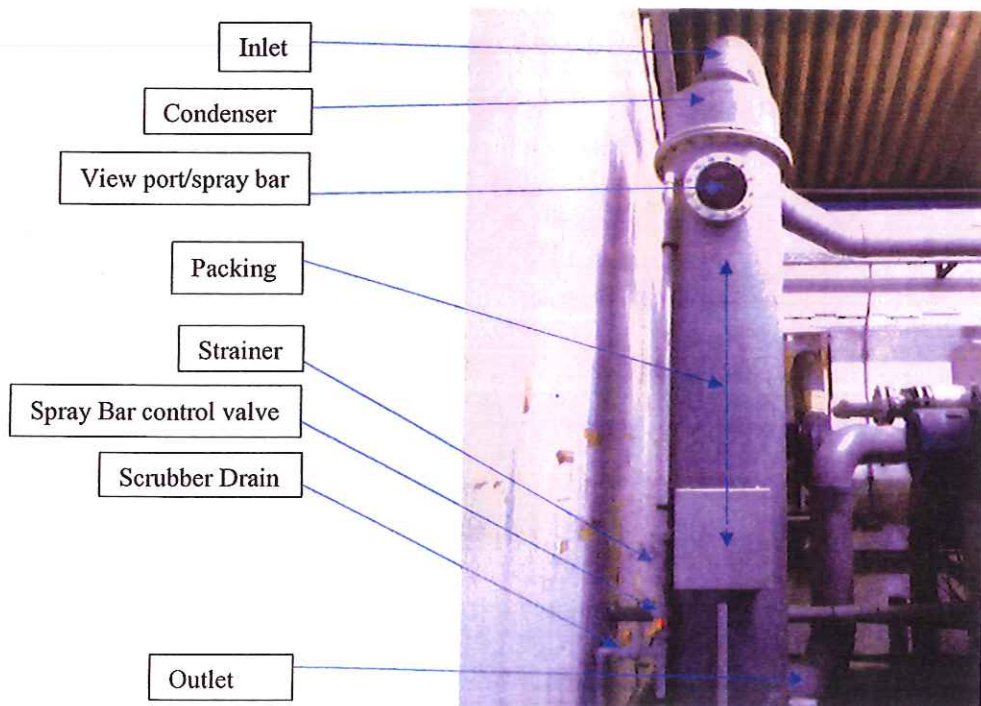
Details of Wet Scrubber

STAINLESS RESTORATION LTD

Design, Manufacture, Installation and Commissioning of Plant, Equipment and Control Systems in Polymers & Metals

The Scrubbing Column is designed to neutralize any acidic vapours leaving the Pickle Plant via the extraction system. It does this by a combination of spraying an alkali water mix in to the vapour stream, which cools the vapour stream and condenses some of the acid. The vapour stream is forced through plastic packing to ensure maximum contact with the caustic water mix. After the vapour stream has passed through the scrubber the acid content will be reduced to safe limits.

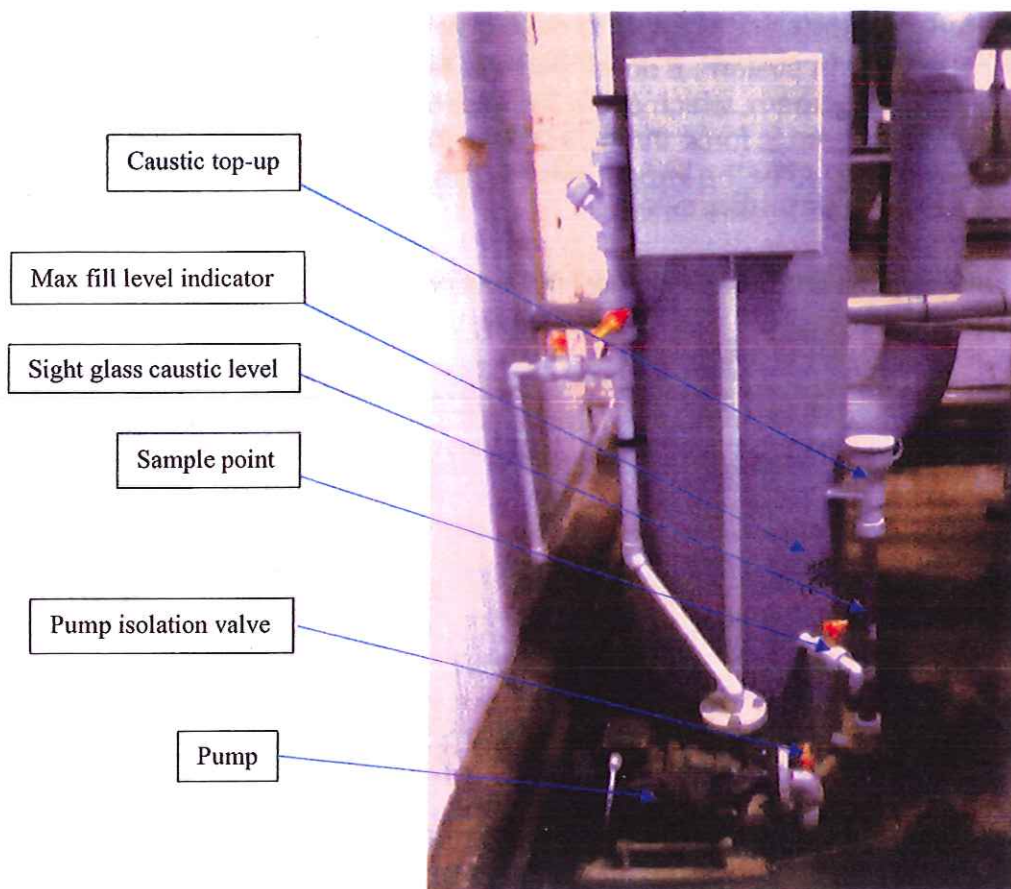
Ensure maintenance checks are carried out routinely.





To access spray bar isolate and lock off pump and spray bar valve, open view port with 13mm spanner. Remove view port using correct PPE unscrew spray bar from socket and clean. Reassemble and remove locks check for leaks.

To remove strainer basket isolate Spray Bar valve and lock off, using correct PPE remove strainer basket by rotating the knob anti-clockwise and clean if necessary. Reassemble and remove locks and check operation.





Emissions to Air

The acid used is a proprietary mixture of nitric acid and hydrofluoric acid (Enerjex 301) which is maintained at a temperature of 30⁰C. Possible emissions are of nitrogen oxide and hydrogen fluoride. These gases are created when the acid is in contact with the stainless steel for approximately 20 minutes during the operating cycle.

The plant typically operates on 4 days per week and is likely to see up to 3 cycles per day. The plant may operate between 07.15 and 17.00 Monday to Thursday.

SUPPLIER DETAILS OF ENERJEX 301 - PICKLE LIQUID

Enerjex 301 Pickle Liquid is a liquid pickling solution designed for descaling stainless steels and other grades as listed below.

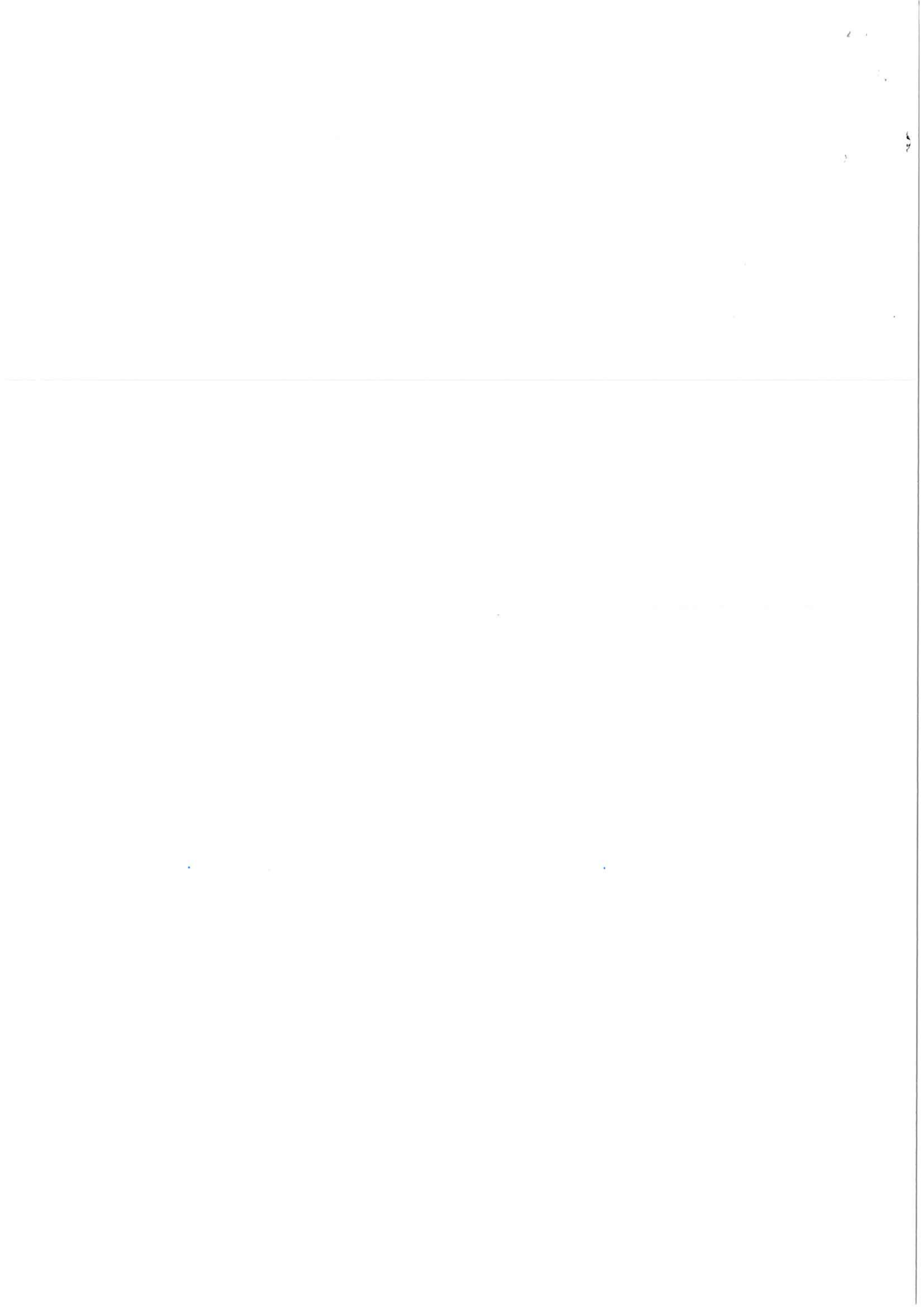
It can be blended and designed to be used on any grade of steel such as stainless steel 304 and 316 grades and higher grades like Duplex 22Cr/25Cr.

It has no specific texture and has a water like consistency (low viscosity) since it is designed to have items immersed in it.

During the welding process the steel is raised above its oxidising temperature (~400°C) and the formation of a rainbow coloured oxide scale is/can be deleterious to the corrosion resistant properties of the stainless steel, particularly when a grade is operating close to its design limits.

Service conditions that contain levels of Chloride are particularly at risk, eg coastal locations and offshore application.

Enerjex 301 Pickle Liquid conforms to ASTM A380 A1.1.





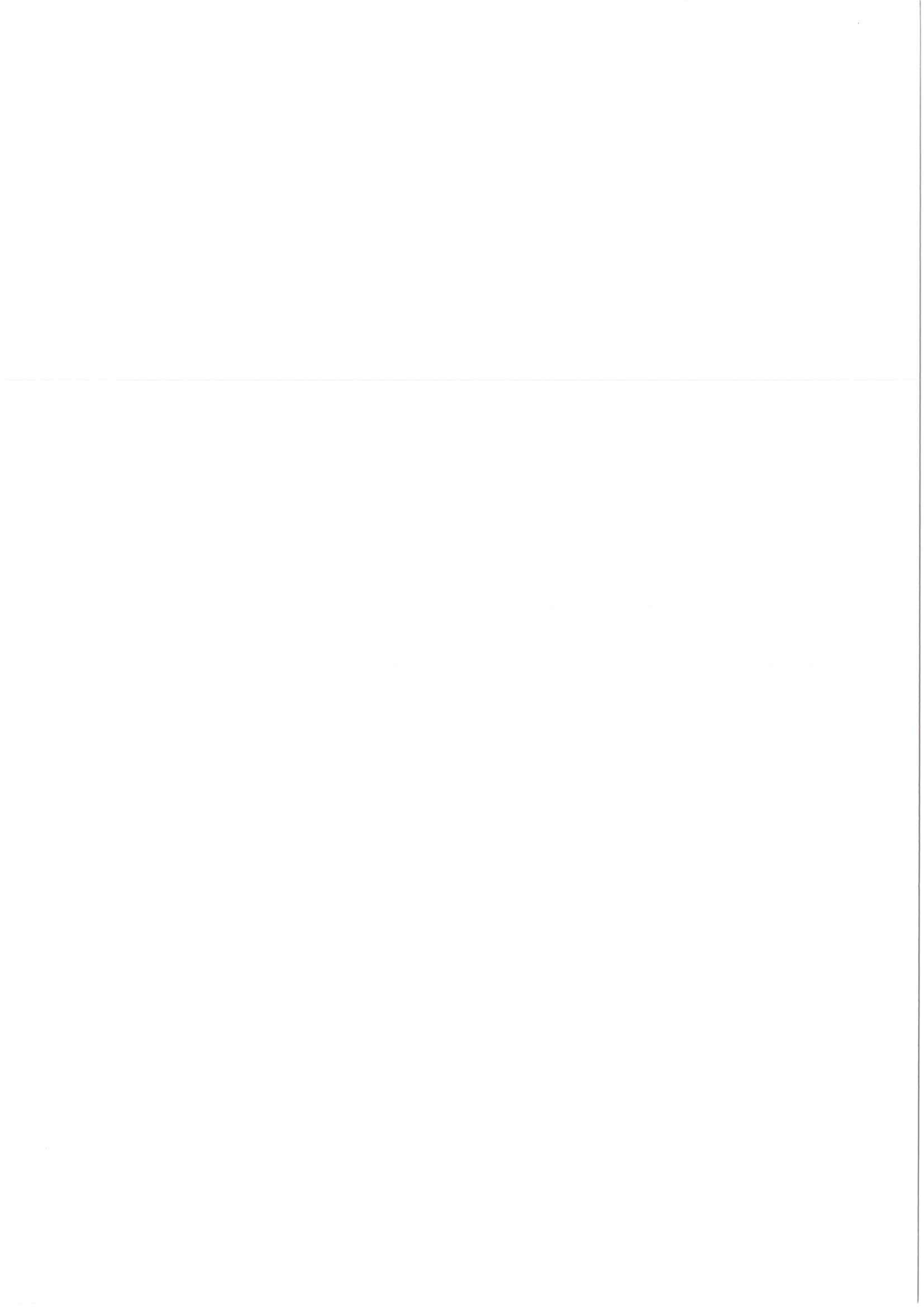
B2.2 Atmospheric Emissions

Point Source

Emissions to the atmosphere are via the stack pipe (shown as S1 on plan). Possible emissions are of nitrogen oxide and hydrogen fluoride. These gases are created when the acid is in contact with the stainless steel for approximately 20 minutes during the operating cycle.

Fugitive Source

It is not anticipated that there will be any fugitive emissions from the operation of this plant. Emissions are only possible during the chemical reaction of the acid and the steel, these occur within the confines of the sealing pickling chamber. The pickling chamber is prevented from operating with the loading door opening by safety interlocks.





B2.3 Reducing the Emissions

Plant Operation

To reduce the level of emissions the plant emits, the plant only operates for a very limited amount of time. These emissions are created when the acid is in contact with the stainless steel for approximately 20 minutes during the operating cycle.

The plant typically operates on 4 days per week and is likely to see up to 3 cycles per day. The plant may operate between 07.15 and 17.00 Monday to Thursday.

It is estimated that total time per day that emissions may be produced is 60 minutes. As described the emission period is for 20 minutes every 2 – 3 hours during the working day.

Wet Scrubber

The plant is fitted with a wet scrubber designed to neutralize the acidic vapours created during the plant operation.



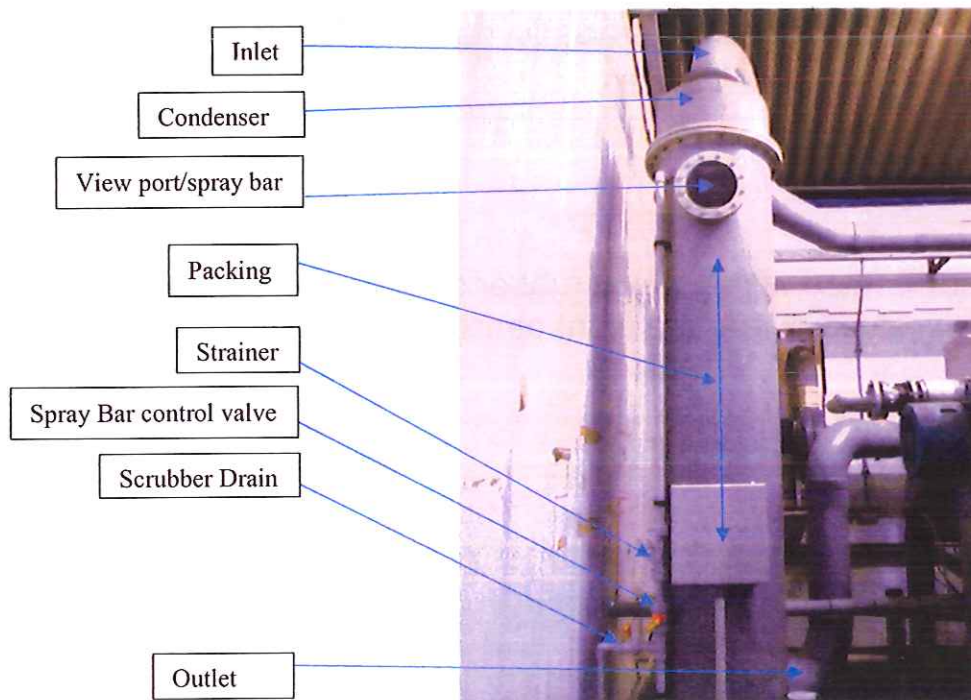
Details of Wet Scrubber

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Ensure maintenance checks are carried out routinely.



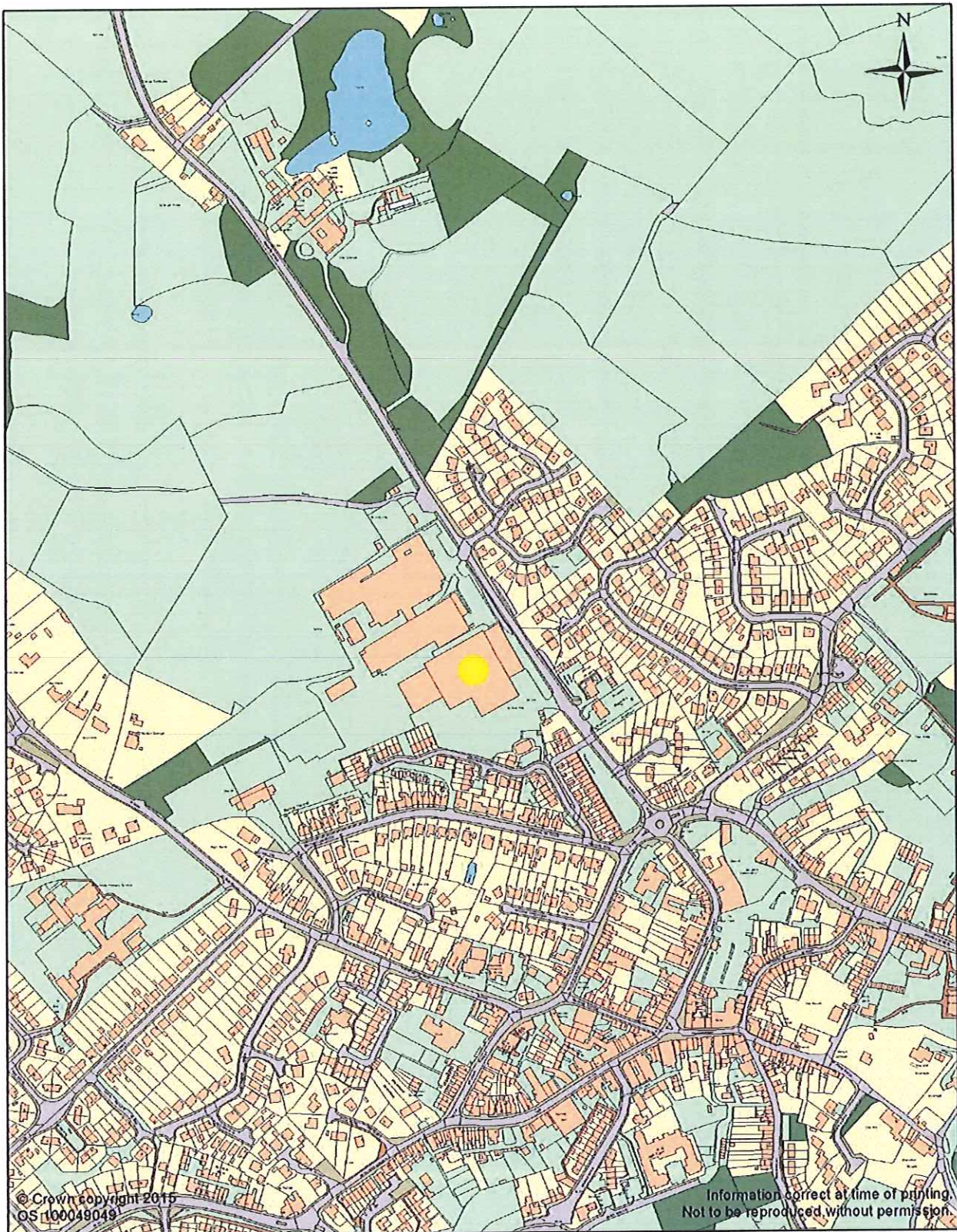


B2.4 Monitoring Emissions

Emission monitoring will be carried out annually by an approved contractor who will conduct sampling in accordance with official guidance. Shropshire Council will be given 14 days notice of the sampling and are welcome to attend during this process. The results of the sampling will be forwarded to Shropshire council when available.



Fabdec Ltd (shown by yellow spot) and part of Ellesmere.



Shropshire
Council

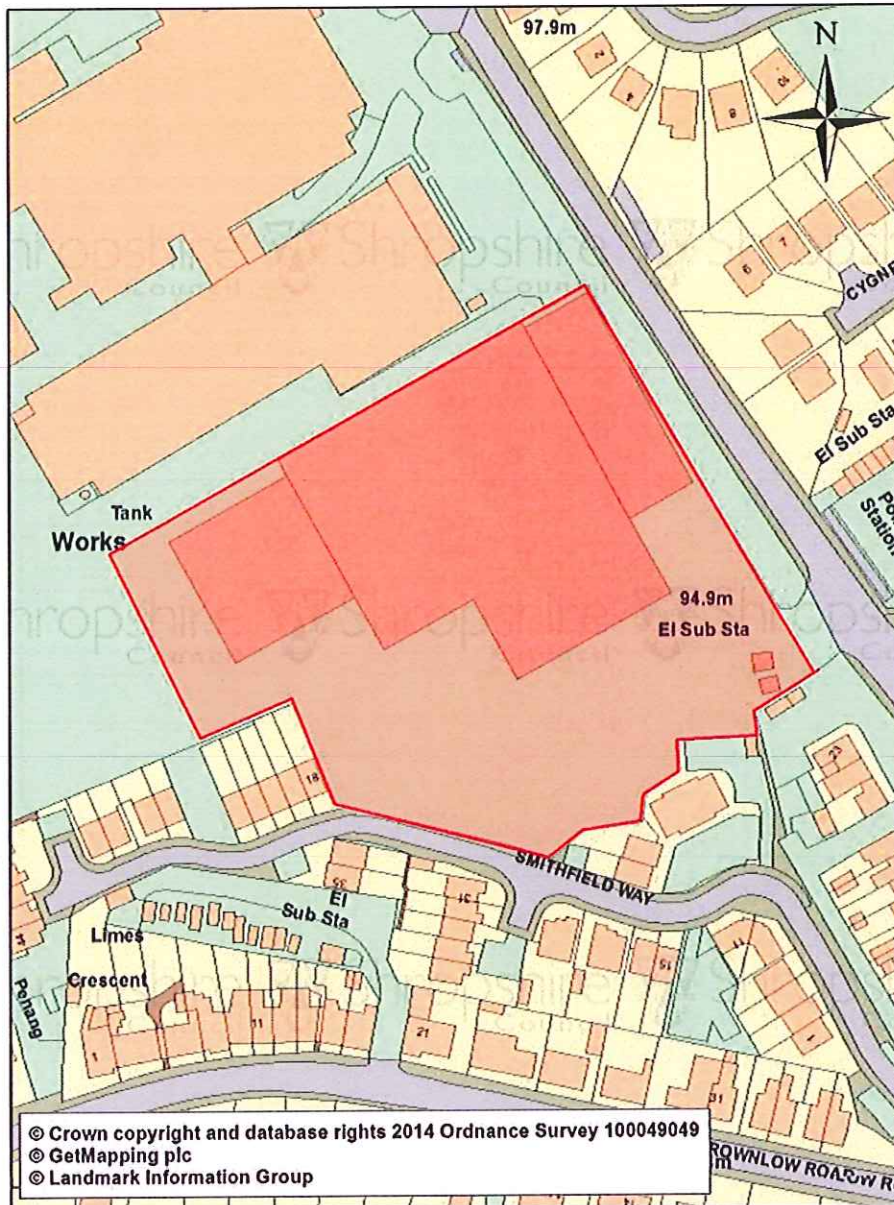
Environmental Resilience Team

Public Protection, Shropshire Council
Shirehall, Abbey Foregate, Shrewsbury, SY2 6ND

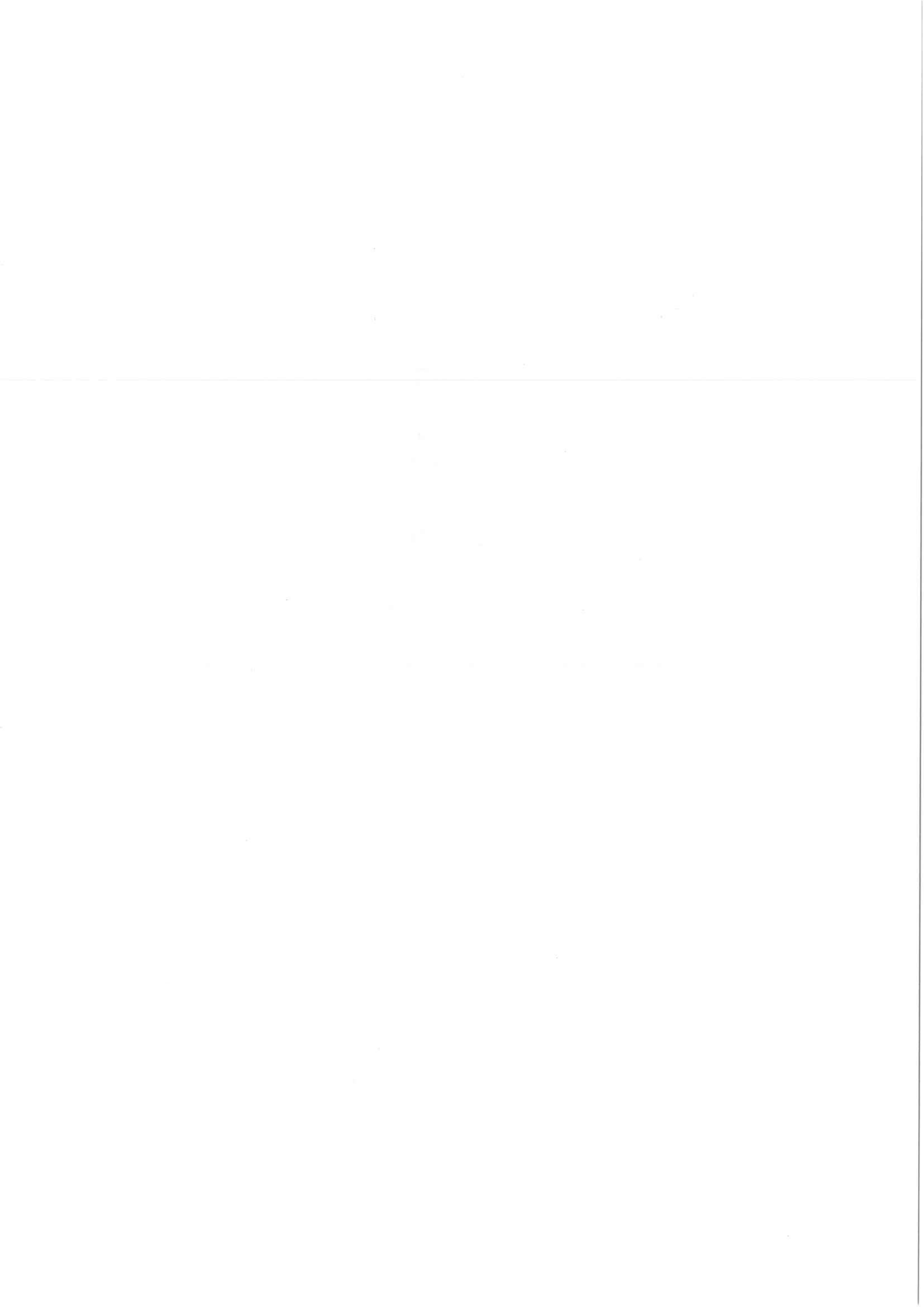
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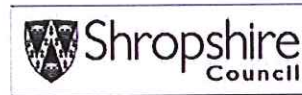
Plan EPR BError! Reference source not found./A1 Installation Boundary (Marked in Red)



Date: 10/03/2014



Plan EPR BError! Reference source not found./A2 Location of Points of Discharge to Air



Date: 10/03/2014

