

DECOMMISSIONING PROJECT

D014

**UTILITY
SUPPLIES**

**PROCESS
INFORMATION**

1. SUMMARY REPORT

2. PROJECT SCOPE

3. CHEMICAL INFORMATION

**4. DECONTAMINATION PROCEDURES &
ASSOCIATED RISK ASSESSMENTS**

5. PLANT P&ID's – if applicable

6. WASTE RECORDS

7. WASTE TRANSFER NOTES

1

PROJECT NUMBER	<i>Decommissioning 014</i>
PROJECT:	<i>Utility Systems</i>
PLANT:	<i>Various</i>
DOCUMENT REFERENCE:	<i>D014/PROCESS/012 Decontamination Summary Report</i>
DATE:	<i>17th October 2012</i>
BY:	<i>Jane Mills</i>

Sign-off:

Name	Position	Signature	Date
Jane Mills	Site Engineering Manager	<i>Jane Mills</i> JANE MILLS	17/10/12
Duncan Marlor	Site Manager	<i>[Signature]</i>	17/10/12

1. Summary

The various items of equipment associated with the utilities have been through a programme of decontamination and decommissioning to ensure that as much preparation as possible has been completed ready for demolition.

The purpose of this report is to detail the status of the equipment on the plant and to identify any potential areas of contamination that remain in the building/equipment.

This report does not waive the responsibility of the Principal Contractor to take reasonable precautions during the demolition to ensure that the work-force is not exposed to an unreasonable risk.

2. Introduction

This report details the status of all plant and equipment that have been decontaminated as part of the Liquids Production decommissioning project. This document along with the E.I.C report gives the plant status for the purposes of demolition.

Where equipment/pipework has been flushed with water, these lines have been sprayed with yellow paint. If no flushing has been completed (i.e spiral wound pipework) or where obviously visual contamination remains that cannot be removed by flushing, these items have been sprayed with BLUE paint.

These visual indications do not provide a guarantee as to the "Cleanliness" of the equipment, only that the pipework or equipment has been flushed with water or subject to a production clean.

All decontamination has been completed following D014/PROCESS/006 – Decontamination Procedure – Utilities. Any amendments to the decontamination that were completed as a requirement of the physical decontamination process have been hand-written into the Decontamination Procedure document.

3. Plant Status

Table 3.1 Plant Status Summary

Utility System	Decontamination Method	Status
Natural Gas	Purged with nitrogen and then fully isolated by valve and blanks. All pipework to site above ground removed.	Fully purged and all gas main pipework, meters and governors removed.
Nitrogen System	Liquid nitrogen tank and receiver fully vented before removal by Air Products.	Equipment removed by Air Products as on lease
Process Air	Compressors decommissioned by Control Gear and disconnected from system.	Air compressors have been transferred to Spain and are no longer on site.
Condensate System – including hotwell	Condensate system drained and hotwell flushed with fresh water	Should be considered clean
Process Water	Isolated to all buildings and drained.	Main supply to fire hydrants remains. Main supply to administration building is via P1 Production

		building which is still therefore LIVE. In order to demolish P1A, the water supply to the admin building will need to be disconnected.
Steam supply	All steam lines drained of water	Should be considered clean
Cooling Towers	Decommissioning completed as part of the production buildings decontamination procedures.	All cooling towers have had a Legionella clean and can be considered clean.

Where testing has been completed, this does **NOT** guarantee that the item is free from contamination, only that it has been tested for certain chemicals that could be present. **NO GUARANTEES ARE GIVEN ON THE CLEANLINESS OF THE EQUIPMENT.**

The isolation of all electrical equipment is detailed in the E.I&C report for this building.

ANY EQUIPMENT NOT DETAILED IN THIS REPORT SHOULD BE TREATED AS CONTAMINATED AND LIVE.



Rhondda Cynon Taff County Borough Council
Application to change a cooling tower notification
Notification of Cooling Towers and Evaporative
Condensers Regulations 1992

For help contact
food.health&safety@rctcbc.gov.uk
Telephone: 01443 425001

* required information

Section 1 of 3

You can save the form at any time and resume it later. You do not need to be logged in when you resume.

System reference

131498

This is the unique reference for this application generated by the system.

Your reference

RCT/CLJ/149

You can put what you want here to help you track applications if you make lots of them. It is passed to the authority.

Are you an agent acting on behalf of the applicant?

Yes No

Put "no" if you are applying on your own behalf or on behalf of a business you own or work for.

Applicant Details

* First name

Scott

* Family name

Cinderby

* E-mail

scott.cinderby@clariant.com

Main telephone number

01443 219711

Include country code.

Other telephone number

07920137923

Indicate here if you would prefer not to be contacted by telephone

Are you:

- Applying as a business or organisation, including as a sole trader
 Applying as an individual

A sole trader is a business owned by one person without any special legal structure. Applying as an individual means you are applying so you can be employed, or for some other personal reason, such as following a hobby.

Applicant Business

* Is your business registered in the UK with Companies House? Yes No

* Registration number

3380658

* Business name

Clariant Production UK Ltd

If your business is registered, use its registered name.

* VAT number

GB 700656560

Put "none" if you are not registered for VAT.

* Legal status

Private Limited Company

Continued from previous page...

* Your position in the business

Home country

The country where the headquarters of your business is located.

Registered Address

Address registered with Companies House.

* Building number or name

* Street

District

* City or town

County or administrative area

* Postcode

* Country

The information given here will be saved and will be pre-filled in future forms.

Section 2 of 3

DETAILS OF THE LICENCE, PERMIT OR REGISTRATION

Identifying The Licence

* Type of licence, permit or registration held

Licence, permit or registration number

Name of licence holder

* What do you want to do with the licence, permit or registration?

- Surrender it Report a change

Surrender A Licence

* Is the surrender with immediate effect?

- Yes No

Explain why the licence, permit or registration will be surrendered

The Clariant Production UK Ltd site at Pontypridd has ceased all operations and is due to be demolished in November 2012. All three registered cooling towers have been decommissioned.

Section 3 of 3

ATTACHMENTS

AUTHORITY POSTAL ADDRESS

Continued from previous page...

Address

Building number or name	Public Health & Protection
Street	Ty Elai
District	Dinas Isaf East
City or town	Williamstown
County or administrative area	
Postcode	CF401NY
Country	uk

DECLARATION

I am aware of the provisions of The Notification of Cooling Towers and Evaporative Condensers Regulations 1992. The * details contained in the application form and any attached documentation are correct to the best of my knowledge and belief.

Ticking this box indicates you have read and understood the above declaration

This section should be completed by the applicant, unless you answered "Yes" to the question "Are you an agent acting on behalf of the applicant?"

* Full name	
* Capacity	
Date (dd/mm/yyyy)	

Add another signatory

Application history

Application Type:	Application to change a cooling tower notification
Authority:	Rhondda Cynon Taff County Borough Council
Authority Email:	food.health&safety@rctcbc.gov.uk
Authority Phone:	01443 425001
Submitted by:	Scott Cinderby;Clariant Production UK Ltd
Email:	scott.cinderby@clariant.com
Phone:	
Authority Ref:	
Applicant Ref:	RCT/CLJ/149
System Ref:	131498
Payment Ref:	

Status History

Tacit consent granted at 07:00AM on 21/09/2012
Application receipted at 16:52PM on 06/09/2012
Application submitted at 16:11PM on 06/09/2012
Application started at 15:09PM on 06/09/2012

Message History

Date: 21/09/2012
From: Rhondda Cynon Taff County Borough Council
Subject: Your application has been deemed approved
Message: In the absence of a decision from the authority by the due date, your application has been deemed approved on 21/09/2012 07:00
Attachment names(s)

Date: 06/09/2012
From: Rhondda Cynon Taff County Borough Council
Subject: Your application has been receipted
Message: Rhondda Cynon Taff County Borough Council acknowledged receipt of your application on 06/09/2012 16:52
Attachment names(s)

2

PROJECT NUMBER
Decommissioning 014
PROJECT:
*Utilities
Decommissioning*
PLANT:
Utilities
**DOCUMENT
REFERENCE:**
*D014/PROCESS/001
Project Scope*
DATE:
10th August 2012
BY:
Jane Mills
Project Approvals:

Name	Position	Signature	Date
Jane Mills	Site Engineering Manager	<i>Jane Mills</i> JANE MILLS	30/8/12
Paul Davies	Project Engineer	<i>Paul Davies</i>	11/SEP/2012
John Spence	Project Engineer	<i>John Spence</i>	30/8/12
Scott Cinderby	ESHA Manager	<i>S. Cinderby</i>	11.09.12
Michael Macintosh	Plant Manager	<i>Michael Macintosh</i>	11.09.12
Duncan Marlor	Site Manager	<i>Duncan Marlor</i>	14/9/12

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1. Introduction: Business Case

Production at the Clariant Production UK Ltd, Pontypridd site has ceased and it is proposed to demolish the site.

The purpose of this project is to ensure that all utility systems to the site are decommissioned in order that the plant may be demolished safely.

This project will ensure that the plant status is recorded and any isolations/equipment removals are documented.

2. Project Summary

This project details the activities and isolations required for decommissioning of the site utility systems to ensure that all the buildings on the site are left in a “known” condition and all services (e.g. power, utilities) are left “cold & dead”. This is the final project to be completed on the Pontypridd site as this will isolate all power supplies ready for building demolition.

The Nitrogen system is a lease unit on hire from Air Products. As part of the decommissioning activities, the nitrogen generator and Liquid Nitrogen Tank will be removed under the supervision of air products.

At the moment, the air compressors are identified for transfer to Spain as part of the asset transfer programme. In order to complete this work, all air usage on site must have ceased and all equipment decommissioned.

The main items of equipment covered by this decommissioning are:

- Nitrogen System
 - Generator
 - Liquid Nitrogen Tank
- Compressed Air system
 - 2 x Air compressors
 - 2 x Air Receivers – these will need to be de-notified from Pressure System Regulations.
- Process Water
- Condensate
 - Hotwell room
 - Various condensate pumps
- Steam
 - From boiler house – boiler house to be decommissioned separately.
- Electricity Supply to the following Switchrooms
 - P1A/B Building – SR5, SR7, SR8, SR9
 - P2 Building – SR12, SR15, SR10 (No equipment, just lights & fire alarms)
 - P3 Building – SR13, SR14
 - Recovery Plants – SR14
 - Warehouse 1&2 – SR20
 - P8/P9 Building – SR20 (2nd Transformer & 11kV cable)
 - P5/Liquids Building – SR6
 - P6 Building – Switchroom SR4, SR5
 - Pilot Plant – SR3
 - Administration Building – SR1
 - Boilerhouse – SR1
 - Showerblock – SR1

All power supplies to buildings will be isolated at end of October/start of November to allow demolition to start. Power to SR1 (and hence Administration building/showerblock) will be isolated January 2013.

The decontamination/decommissioning of any other equipment is outside the scope of this project and will be dealt with separately.

3. Project Scope

3.1 Process/Production

Decontamination of Utilities in D014/PROCESS/006 – Decontamination Procedure

3.2 Mechanical Scope

Mechanical decommissioning of Utilities as identified in D014/MECH/001 – Mechanical Isolation Procedure

3.2 E.I & C Scope

Electrical, Instrumentation and Control decommissioning of Utilities identified in D014/E.I&C/001 – E.I.&C Scope Document.

3.3 Other

- Update SAP to remove delete/disable preventative maintenance routines.
- Review spares and assess any changes to spares holding.
- Update asset register with plant status.

4. Project Schedule

4.1 Project Schedule

Plant will be available for decommissioning to start September 2012. It is anticipated that all electrical supplies to production buildings will be decommissioned by END OCTOBER 2012 ready for building demolition, the administration building will be electrically decommissioned by End of November 2012.

5. Reference Documents

- See D014 - Document Register for details of all project documents.

3

Our Reference Number : 8150016756
Your Reference Number : Application Ref: 12/0942/23



Wales & West House
Spooner Close
Celtic Springs
Coedkernew
Newport NP10 8FZ

www.wwutilities.co.uk

FAO:

J Mills
Llantwit Fardre
PONTYPRIDD
Mid Glamorgan
CF38 2SN

Date : 13.09.2012
Network Contact : Nic Musker
Telephone : 02920 278912
Fax : 0845 072 0852

Dear J Mills

Re: Exchange of Information

Wales & West Utilities acknowledge receipt of your notice received on **13.09.2012**, advising us of your intention to carry out work at:

Clariant UK Ltd, Llantwit Fardre, PONTYPRIDD, Mid Glamorgan, CF38 2SN

We enclose an extract from our mains records of the area covered by your proposals together with a comprehensive list of General Conditions for your guidance. This plan shows only those pipes owned by Wales & West Utilities in its role as a Licensed Gas Transporter (GT). Gas pipes owned by other GT's and also privately owned may be present in this area. Information with regard to such pipes should be obtained from the owners. The information shown on this plan is given without obligation, or warranty, the accuracy thereof cannot be guaranteed, service pipes, valves, syphons, stub connections, etc., are not shown but their presence should be anticipated. No liability of any kind whatsoever is accepted by Wales and West Utilities, its agents or servants for any error or omission.

Safe digging practices, in accordance with HS(G)47, must be used to verify and establish the actual position of mains, pipes, services and other apparatus on site before any mechanical plant is used. It is your responsibility to ensure that this information is provided to all persons (either direct labour or contractors) working for you on or near gas apparatus.

If you have requested a new connection or diversion of our apparatus, information will be sent under a separate letter.

If you have any queries please contact **Nic Musker** on **02920 278912** who will be happy to assist you.

Yours sincerely

A handwritten signature in black ink, appearing to read 'N. Musker'.

Nigel Winnan
Connections Manager
Wales & West Utilities

24 hour gas escape number
Rhif 24 awr os bydd nwy yn gollwng

0800 111 999*

*calls will be recorded and may be monitored
caiff galwadau eu recordio a gellir eu monitro



BSL210

Wales & West Utilities Limited

Registered Office:
Wales & West House, Spooner Close, Coedkernew, Newport NP10 8FZ
Registered in England and Wales: No. 5046791

GENERAL CONDITIONS TO BE OBSERVED FOR THE PROTECTION OF APPARATUS AND THE PREVENTION OF DISRUPTION TO GAS SUPPLIES.

General conditions affecting the design, construction or maintenance of services and/or structures or other works in the vicinity of Wales & West Utilities' plant, pipelines and associated installations:

These general conditions apply only to the gas apparatus and pipes operated by Wales & West Utilities. It is possible that there may be other gas transporters with apparatus in the vicinity and you should ensure that you have made enquiries of them and have complied with their requirements.

1. Graphic Representation of Gas Mains

Any plans supplied or marked up by Wales & West Utilities will indicate the APPROXIMATE location of its apparatus. This information is provided as a general guide only; its accuracy cannot be guaranteed and is given without obligation or warranty. Service pipes are not shown but their presence should be anticipated. No liability whatsoever is accepted by Wales & West Utilities, its agents or servants for any error, omission, discrepancy or deviation.

Should you require assistance on site locating Wales & West Utilities' apparatus, please contact our Plant Protection Team on 02920-278912.

2. Methods of Working

The following methods of work shall not normally be permitted within the limits of distance indicated (relative to the established pipe position). Any variances must have prior consent from Wales & West Utilities:

Mechanical Excavation	3m (1m in respect of low pressure mains)		
Piling / Pile removing / Boring	15m	Hydraulic Testing	8 m
Welding or other hot works involving naked flame*	15m	Explosives	250m

Wales & West Utilities must be consulted prior to carrying out any excavation work within **10m** of any above or below ground gas installations or pipeline. No excavation works may commence within **50m** of a High Pressure or Very High Pressure Pipeline unless the pipeline has been located by tracing and its precise route identified.

* NOTE: Welding or other hot works involving naked flames shall be carried out at a safe distance to the satisfaction of a Wales & West Utilities Engineer. A check should be made prior to the commencement of works, to ensure a gas free atmosphere exists. It is also necessary to monitor the atmosphere at regular intervals for the duration of the works. In no case shall such activities take place in any Wales & West Utilities Easement without the written consent, and in the presence, of a Wales & West Utilities representative.

No work shall be undertaken near, nor heavy plant or equipment moved over, any gas pipeline or apparatus until all of the following conditions have been complied with.

Where Wales & West Utilities have apparatus in the vicinity of your work, any damage to it could have serious consequences. In view of this and in the interests of safety a meeting should be arranged before the commencement of work on site between Wales & West Utilities representatives, representatives of the promoting authority, the contractors, and any other interested parties. At this meeting the suggested program of site works and plant safety should be discussed. It is essential that this meeting is convened well in advance of commencement on site. Access to Wales & West Utilities' plant and facilities for inspection by Wales & West Utilities staff must not be affected. Where formal consent has been given, **A MINIMUM OF SEVEN DAYS NOTICE IS REQUIRED** before carrying out work in Wales & West Utilities easements, or the appropriate notice under the New Roads & Street Works Act where existing plant is situated within the public highway.

3. Proximity of Other Plant

A minimum clearance of **600 millimetres (mm)** should be allowed between all plant being installed and an existing gas main operating above medium pressure (MP), whether the adjacent plant is parallel to or crossing the gas pipe. For mains operating at MP or below, this distance can be reduced to 300mm. **NO APPARATUS SHOULD BE LAID OVER AND ALONG THE LINE OF A GAS PIPE IRRESPECTIVE OF CLEARANCE.**

No manhole or chamber shall be built over or around a gas pipe and no work should be carried out which results in a reduction of cover or protection over a pipe without consultation with and the agreement of Wales & West Utilities staff.

4. Protection

Where any works cross or run in close proximity to Wales & West Utilities apparatus, periodic visits must be made by a linesman. His requests for protection or support to the apparatus shall be immediately observed.

Suitably designed crossing points are to be constructed to the satisfaction of a Wales & West Utilities Engineer. These crossing points shall be clearly indicated by the erection of buntings and crossings at other places should be prevented.

24 hour gas escape number
Rhif 24 awr os bydd nwy yn gollwng

0800 111 999*

*calls will be recorded and may be monitored
caiff galwadau eu recordio a gellir eu monitro



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Registered in England and Wales: No. 5046791

Backfill material adjacent to Wales & West Utilities apparatus shall be soft fill or sand, containing no stones, bricks, or lumps of concrete etc., placed to a minimum 150mm around the mains and is to be well compacted by hand. No power consolidation shall take place above the main until 300mm of soft fill has been compacted by hand.

5. Damage to Coatings

Where a gas pipe is coated with special wrapping and this is damaged, even to a minor extent, Wales & West Utilities must be notified so that repairs can be made to prevent future corrosion and subsequent leakage. **WHERE MINOR DAMAGE TO COATING IS REPORTED TO WALES & WEST UTILITIES PRIOR TO BACKFILL THE NECESSARY REPAIR WILL BE MADE FREE OF CHARGE.**

6. Cathodic Protection

Where Wales & West Utilities apparatus is cathodically protected either by sacrificial anode or impressed current and where new apparatus is to be laid and is to be similarly protected, Wales & West Utilities will require to carry out interaction tests to determine whether its own system is adversely affected. The cost of any mutually agreed remedial action will be recharged to the authority installing the new apparatus. If any bond wires, test leads etc., used in connection with cathodic protection systems are damaged or found to be in poor condition, broken or disconnected, Wales & West Utilities must be notified prior to backfilling so that a repair can be made.

7. Hot Works

Even when a gas free atmosphere exists care must be taken when carrying out hot works in close proximity to gas plant in order to ensure that no damage occurs. Particular care must be taken to avoid damage by heat or naked flames to plastic gas pipes or to the protective coatings on other pipes.

8. Demolition

Live gas services must be disconnected **PRIOR** to demolishing any property, arrangements must be made for Wales & West Utilities to check for the presence of any live gas services.

9. Tree Planting

Wales & West Utilities must be contacted prior to all tree-planting works above or near our apparatus. Further information can then be made available.

10. Deep Excavations

Any work involving deep excavations (1.5m or more) will be subject to the "Model Consultative Procedure for Pipeline Construction involving Deep Excavations". This may require the diversion of Wales & West Utilities' apparatus prior to the commencement of your works. Detailed plans and cross sections will be required in order to determine the effect of these works on Wales & West Utilities' apparatus.

11. Leakage From Gas Mains or Services

If damage or leakage is caused or an escape of gas is smelt or suspected the following action should be taken at once:

- Remove all personnel from the immediate vicinity of the escape.
- Inform the Gas Emergency Service on **0800 111 999**
- Prevent any approach by the public, prohibit smoking, and extinguish all naked flames or other sources of ignition at least 15 metres from the leakage. Do not operate any electrical switches in the vicinity of the escape.
- Assist gas personnel, Police and/or Fire Services as requested.

**IN THE EVENT OF A LEAK OBSERVE THE ABOVE BUT DO NOT ATTEMPT TO SEAL THE LEAK
REMEMBER - IF IN DOUBT, SEEK ADVICE FROM WALES & WEST UTILITIES.**

12. Building Proximities

There are minimum proximity distances for buildings from Wales & West Utilities' mains depending on both the operating pressure and the material of the main. Advice should be sought from Wales & West Utilities prior to building works taking place to confirm these distances.

Temporary buildings should not be placed above any gas pipe or within 3.0 metres of mains operating above 75mbar (medium, intermediate and high pressure mains) during construction activities and in no circumstances should permanent structures be built over any pipe transporting gas.

13. Site Responsibilities

All costs incurred by Wales & West Utilities for the repair of direct or consequential damage to gas plant will be rechargeable (with the exception of paragraph 5). Wales & West Utilities reserves the right to divert any affected apparatus or alternatively specify suitable protection of its apparatus if proved necessary during the course of site works, the cost of which will be chargeable.

The above requirements do not relieve you of the responsibility of taking all precautions necessary to safeguard the Company's plant and to avoid risk to persons and property. The persons for whom the works are being undertaken, their servants, agents and contractors shall indemnify Wales & West Utilities servants, agents and contractors against any loss, damage, expenses, claims and actions incurred or brought against Wales & West Utilities, its servants, agents and contractors in consequence of the provision of these works and activities associated therewith or ancillary thereto.

KEY TO MAPS

LP	Low Pressure	CI	Cast Iron
MP	Medium Pressure	SI	Spun Iron
IP	Intermediate Pressure	DI	Ductile Iron
HP	High Pressure	PE	Polyethylene
		ST	Steel

24 hour gas escape number
Rhif 24 awr os bydd nwy yn gollwng

0800 111 999*

*calls will be recorded and may be monitored
caiff galwadau eu recordio a gellir eu monitro



BSL240

Wales & West Utilities Limited

Registered Office:

Wales & West House, Spooner Close, Coedkernew, Newport NP10 8FZ

Registered in England and Wales: No. 5046791

ADDITIONAL GENERAL CONDITIONS FOR WORKING IN THE VICINITY OF GAS MEDIUM PRESSURE PIPES/APPARATUS

1. Planning the Work

1. Current gas plans must be available to relevant personnel on site prior to work starting.
2. Use other signs to assist identification of the presence of gas apparatus such as valve boxes, meter boxes, above ground gas installations, and marker posts.
3. Refer to the "General Conditions to be observed for the Protection of Apparatus and the Prevention of Disruption to Gas Supplies" for instructions relating to work in the vicinity of Wales & West Utilities' ("WWU") plant.
4. Your method of work must incorporate any guidance provided by WWU or its representatives.
5. You should appoint suitably competent operatives to locate and mark the position of underground gas apparatus in accordance with this document and advice provided by WWU.
6. Ensure you have and make use of the contact details of a local WWU plant protection representative.

Gas plans show only those pipes owned by WWU. Service pipes, valves, siphons, stub connections, etc, are not shown but their presence should be anticipated.

2. Before Starting Work

1. Pipe locating equipment must be used in all modes in conjunction with the gas plans.
2. Signals received must be marked by your operatives on the ground well beyond the proposed work area.
3. Brief all persons on site regarding the location of gas pipes and the precautions necessary.

3. When Starting Work

1. Hand dig trial holes to confirm the position and depth of gas pipes within the affected area prior to any mechanical excavation.
2. Mechanical excavation must not be used within any exclusion zones marked around WWU apparatus. Hand held power tools must not be used within 500mm of the confirmed position.
3. When hand digging within 500mm of gas pipes, spades and shovels should be used. Picks, forks and pins must not be used.
4. Bars may only be used as a lever to loosen large rocks.
5. Repeat the use of pipe locating equipment as excavation progresses.
6. Do not use gas pipes as a step. Support long spans and protect them from falling objects.
7. When backfilling, surround gas pipes with fine backfill. Compaction with hand tools to 300mm above the pipe must take place before using mechanical vibratory equipment.
8. During excavation, appropriate PPE must be worn.
9. WWU operates gas pipes/apparatus at different pressure regimes. Unless advice specific to your works is provided by WWU to the contrary, all gas pipes/apparatus shall be treated in accordance with this document.

If the above controls cannot be implemented, immediate guidance must be sought from WWU. Contact your local Plant Protection representative or the Plant Protection Team on 02920-278912.

4. Gas escapes/Damage to Gas Pipes

If an escape of gas has taken place or is suspected, immediately remove all personnel from the immediate vicinity of the escape, inform the **GAS EMERGENCY SERVICE** on **0800 111999**, prevent any approach by the public, extinguish all naked flames or other sources of ignition for at least 15 metres from the escape.

Any instances of damage to gas pipes or apparatus should be reported immediately to your WWU contact. Although no immediate gas escape has occurred, the damage may allow a later escape of gas to take place. Additionally, minor damage to gas pipes or apparatus that is not dealt with immediately by WWU may result in a later failure of the plant.

24 hour gas escape number
Rhif 24 awr os bydd nwy yn gollwng

0800 111 999*

*calls will be recorded and may be monitored
caiff galwadau eu recordio a gellir eu monitro

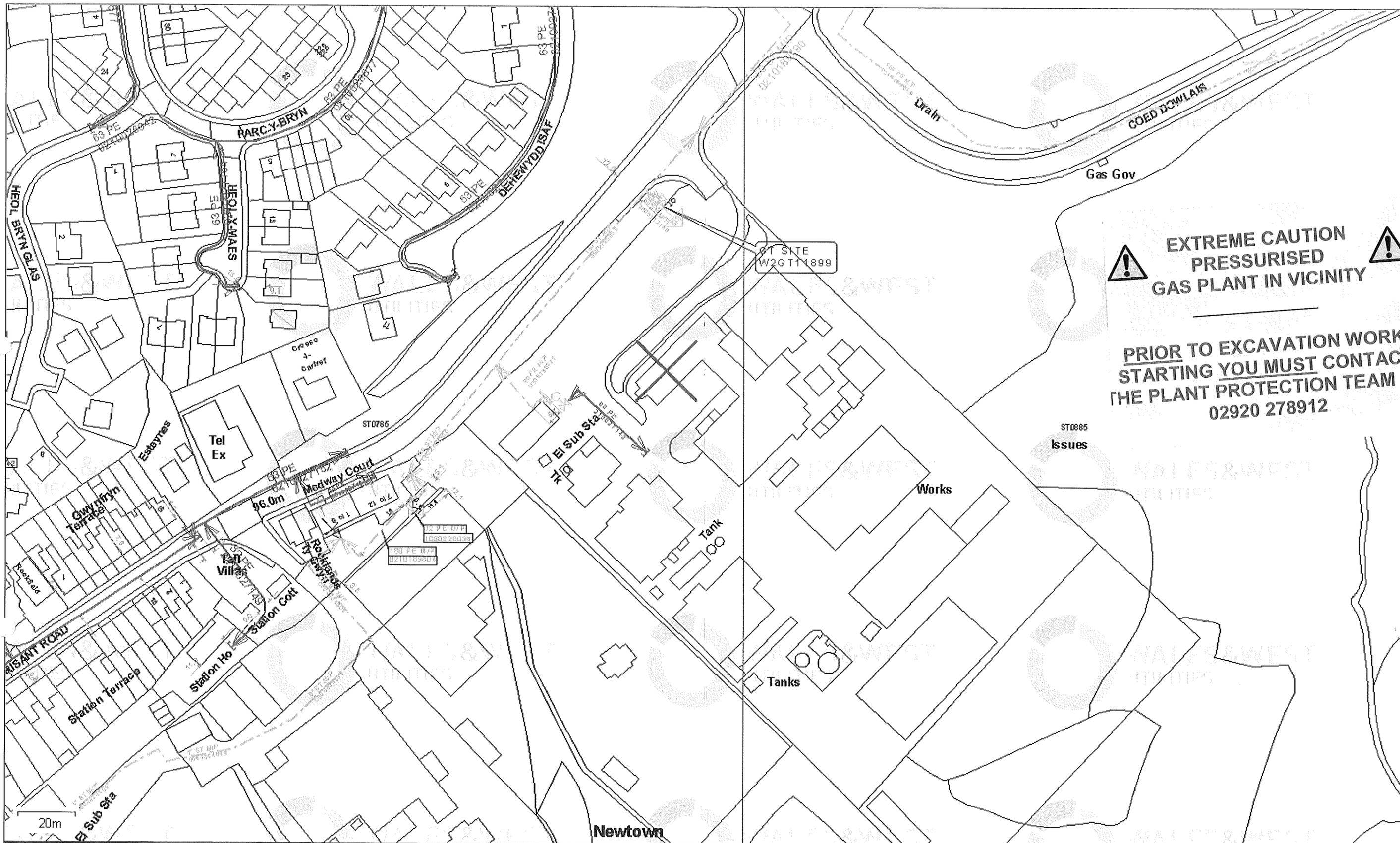


BSL210

Wales & West Utilities Limited

Registered Office:

Wales & West House, Spooner Close, Coedkernew, Newport NP10 8FZ
Registered in England and Wales: No. 5046791



Scale	1 : 1250	
User ID	Nic	
Date	13/9/2012	
Grid Ref:	Easting:	307987
	Northing:	185401

<p>Low Pressure</p> <p>Medium Pressure</p> <p>Intermediate Pressure</p> <p>High Pressure</p> <p>Abandoned</p>	<p>Design Pipes</p> <p>Abandoned</p>	<p>Some examples of plant items</p> <p>Valve</p> <p>Depth of Cover</p> <p>Syphon</p> <p>Diameter Change</p> <p>Material change</p>
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Application version: 1.0.115

TITLE: Not Set

The plan shows those pipes owned by Wales & West Utilities (WU) in its role as a Licensed Gas Transporter (GT). The information shown on this plan is derived from historic information and may have involved re-scaling plans, and the accuracy of it cannot be guaranteed. Service pipes, valves, syphons, stub connections, etc. may not be shown but their presence should be anticipated. No warranties are therefore given in respect of it. WU its employees and contractors do not accept any liability for any inaccuracy or incompleteness in it. You must use safe digging practices, in accordance with HS(G)47, to establish the actual position of mains, pipes, services and other apparatus on site before any mechanical plant is used. It is your responsibility to ensure that this information is provided to all persons (either direct labour or contractors) working for you or near gas apparatus. The information shown on this plan should not be used beyond 28 days from the date of issue of this plan as it is subject to updating.

The plan also provides indications of gas pipes owned by other GTs, or otherwise privately owned, which may be present in this area. This information is not information of WU and WU is unable to verify this information or to confirm whether it is accurate or complete. It is supplied voluntarily to assist the user in determining whether to make contact with other GTs or others. The user must obtain such information from the other GT or person concerned. WU, its employees and contractors do not accept any liability for this information or any inaccuracy or incompleteness in it.

WALES & WEST UTILITIES

Wales & West Utilities Ltd., Wales & West House, Spooner Close, Celtic Springs, Coedkernew, Newport, NP10 8FZ

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PROJECT NUMBER	<i>Decommissioning 014</i>
PROJECT:	<i>Decommissioning of Site Utilities</i>
PLANT:	<i>Utilities System</i>
Document Reference	<i>D014/PROCESS/006 Decontamination Procedure</i>
DATE:	<i>13th September 2012</i>
BY:	<i>Jane Mills</i>

The purpose of this document is to detail the decontamination procedure to be followed to achieve a "KNOWN" condition in terms of chemical contamination for the various items of equipment associated with the decommissioning project. This procedure will NOT "Clean" the equipment.

Name	Position	Signature	Date
Jane Mills	Site Engineering Manager	<i>Jane Mills</i> JANE MILLS	<i>17/9/12</i>
Paul Davies	Project Engineer	<i>PP Davies</i>	<i>17/9/2012</i>
John Spence	Project Engineer	NOT APPLICABLE.	
Scott Cinderby	ESHA Manager	<i>S. Cinderby.</i>	<i>19.09.12</i>
Michael Macintosh	Plant Manager	<i>MR Macintosh</i>	<i>19/9/12</i>
Duncan Marlor	Site Manager	<i>[Signature]</i>	<i>15/9/12</i>

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HEALTH & SAFETY STATEMENT

Although a Decontamination Risk Assessment has been completed, all activities during the decontamination and decommissioning are required to be completed under a permit to work issued by the Team Leader. This will include all Operator activity for the flushing of pipework as well as all maintenance/contractor activity for connecting/disconnecting pipework and hoses.

1. Reference Documents

The following documents are required for reference when using this decontamination procedure:

- D014-PROCESS-001 Project Scope
- D014-PROCESS-002 P&ID List
- D014-PROCESS-003 Chemical Information
- D014-PROCESS-004 Line List
- D014-PROCESS-005 Decontamination Register
- D014-PROCESS-007 Decontamination Risk Assessment
- QA Testing Guidelines for Materials in Chemical Information List.

P&ID's of the plant as identified in Document D014-PROCESS-002 P&ID List.

2. Equipment/Items Required

The following items of equipment will be required in order to complete the decontamination identified in the procedures. This equipment should be obtained before starting any decontamination work and identified as for "Decommissioning ONLY".

- Process Decommissioning Locks
- IBC for clean water
- Waste IBC's for collecting effluent.
- Air diaphragm pump for direct transfer of water into process vessels.
- Hose and lance assembly for connection to air diaphragm pump to empty IBC.
- Hose connection for transfer into process vessels
- Air line for connection of diaphragm pump
- A pallet truck or Fork Lift truck will be required for moving IBC's.

3. Control Overrides Required

In order to enable transfer of material through the plant pipework and pumps, some overrides are required. This will ensure that as much of the in-situ pipework is required as possible. These overrides should be enabled before decontamination starts and removed once decontamination has been completed. All overrides will be recorded in the Systems Log Book.

D014-PROCESS-006 Decontamination Procedure.

Date: 13th September 2012

4. Procedures for Decontamination

Precautions identified in the Decontamination Risk Assessment (D014-PROCESS-D007) must be followed when completing the decontamination identified. For all line breaks or temporary pipework, a permit to work must be obtained.

4.1 Natural Gas

- The decommissioning of the natural gas and subsequent isolation of the gas meter must be completed by a “COMPETENT” person who is registered on the “Gas Safe” register. This will include all purging and necessary isolation to disconnect safely.

Natural Gas System Isolation and Purged by Competent person	
Signature: <i>Jane Mills</i>	Date: <i>6/9/12</i>
Name: <i>J. MILLS</i>	

4.2 Nitrogen System

- Nitrogen tank to be left to vent to remove all pressure from Liquid Nitrogen Tank
- All lines to be opened and vented to ensure that no pressure remains in system.
- Nitrogen generator and Liquid Nitrogen tank to be removed by Air Products as this system is on lease.

Nitrogen System de-pressurisation completed.	
Signature: <i>Jane Mills</i>	Date: <i>15/9/12</i>
Name: <i>J. Mills</i>	
Nitrogen System Removal by Air Products Completed	
Signature:	Date:
Name:	

4.3 Compressed Air

- There are 2 site air compressors. These are to be decommissioned by Air Products ready for transfer to Spain.
- Air compressors can only be isolated once all air usage on site has ceased – i.e. Site Effluent System has been decommissioned.
- Air compressors to be switched off.
- All air lines and the 2 air receivers to be fully vented to removed pressure.
- Open ends to be left around the plant to ensure that system is fully depressurised.

Air compressors isolated and system vented	
Signature: <i>J. Mills</i>	Date: <i>1/10/12</i>
Name: <i>J. Mills</i>	
Air compressors decommissioned by Control Gear ready for Asset Transfer.	
Signature: <i>J. Mills</i>	Date: <i>2/10/12</i>
Name: <i>J. Mills</i>	

4.4 Condensate System

- To decommission condensate system, boilers are to be isolated.
- All steam pipework to be allowed to cool.
- Open drain valves on all condensate pumps and drain condensate to effluent system
- Drain hotwell to grade
- Rinse tank with fresh water.
- Check drain all condensate lines for approximately 3 days after steam system has been shutdown to ensure that there is no water present for the demolition.

Draining and Venting of Condensate system & hotwell completed.	
Signature: <i>Jane Mills</i>	Date: <i>15/9/12</i>
Name: <i>J. Mills</i>	

4.5 Steam Supply

- The decommissioning of the boilerhouse will be completed separately.
- Isolate main steam valve on exit of boilerhouse.
- Allow steam system to cool naturally.
- After 24hours, check drain all steam lines to remove any condensate. This will need to be repeated for the next 3 days to ensure that all condensate is removed from the system ready for the demolition.

Steam supply is isolated and lines drained and vented.	
Signature: <i>J. Mills</i>	Date: <i>15/9/12</i>
Name: <i>J. Mills</i>	

4.6 Electricity Supplies

The details for the electricity isolation of all switchrooms are part of the E.I&C procedure for this project and will not be repeated.

JaneElizabeth Mills

From: Lewis, Paul <Paul.Lewis@gdfsuezuk.com>
Sent: 03 September 2012 14:04
To: JaneElizabeth Mills
Cc: Jolanta.Watson@gdfsuezuk.com
Subject: Clariant : Gas Meter Removal & Meter Pick Up Form, etc
Attachments: Meter pickup template.doc

Hi Jane

Following our earlier conversation, I hereby confirm that Clariant can remove their own gas meters providing, credited I&C gas safety registered personnel are used, they will need to purge the outlet supplies, disconnect the meter and governor equipment and then blank the incoming service valve.

Clariant needs to ensure that the gas meters and associated governor equipment are removed with care because the MAM will charge for any damage.

Upon removal, attached "Meter pick up form" will need to be completed and e-mailed back. Upon receipt GDF Suez will request the meters are picked up by the MAM. Once the meters are collected by the MAM, the supply point will be removed from the industry systems and all supply and metering costs will cease once the systems are updated.

Noting Metering and Transportation costs will only cease once meter has been removed and picked up by National Grid Metering.

I trust the details are self-explanatory, however should you have any further queries or require any clarification please do not hesitate to contact me.

With Regards
Paul

Paul Lewis
Senior Account Manager - European Key Accounts
GDF SUEZ Energy UK

Mobile +44 (0) 7775 910305
HQ Phone +44 (0) 113 306 2143
HQ Fax +44 (0) 113 245 7921

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METER PICK-UP FORM

SITE DETAILS	
Case Notes	*
Site Address:	
Post Code	
Site Contact/tel. number	
Supplier	
Transco Owned Meter	
DATE DISCONNECTED	5 = 09 = 12
Disconnected By	WAYNE BROOKS
ASSET DETAILS	
MPRN	
Meter Serial Number	R1075D419286A6
Meter Model	MRD 1075A6
Manufacturer	ROOTS
LOCATION (Where Meter can be picked up)	GLARIANT PRODUCTION UK LTD GAS HOUSE
Year Manufactured	1986
Final Meter Reading	8838650
Form completed by	JANE MILLS
Contact Telephone Number	01443 219754 07966 349201
Date sent to MAM	02 - OCTOBER 2012

For standard (U16 – U160 and equivalents) meter pickup requests please submit to
ic.standard1@uk.ngrid.com

For non-standard (over U160 and equivalents) meter pickup requests please submit to
ic.nonstandard1@uk.ngrid.com

For domestic (U6, G4 and equivalents) meter pickup requests please submit to

DMR_Coventry@uktransco.com

* In "Case Notes" - enter details (Serial Numbers etc.) of ancillary equipment (e.g. correctors/converters) to be collected at the same time. Also please include corrector reads.

C:\Documents and Settings\jmills\Local Settings\Temporary Internet Files\Content.Outlook\SQZINVPG\Meter pickup template.doc

Serial No

WA 127101

GAS TESTING AND PURGING (NON DOMESTIC)

This form should be completed in accordance with the current requirements of IGE/UP/1 or IGE/UP/1A
Registered Business/engineer details can be checked at www.gassaferegister.co.uk or by calling 0800 408 5500.

gas safe
REGISTER

Gas Safe is a registered trade mark of HSE and is used under licence

Details of Registered Business

Gas Safe Register No 29907
Registered Engineer's Name WAYNE BROOKS
Gas Safe Register Licence Number 3046501
Business D. PRICE HEATING & PLUMBING
Address CILMERI ABERCARNID
MERTHUR TYDFIL.
Postcode CF48 1YS
Contact No 07786106272

Details of Site

Name (Mr/Mrs/Miss/MS) CLARIANT
Address CHURCH VILLAGE
NR CARDIFF, SOUTH WALES
Postcode CF38 2SN
Contact No _____

Details of Landlord/Client (or agent where appropriate)

Name (Mr/Mrs/Miss/MS) _____
Address _____
Postcode _____
Contact No _____

Strength test details

State test method Pneumatic (P) or Hydrostatic (H) _____
Installation - New (N) - New extension (NE) - Existing (E) _____
Have components not suitable for strength testing been removed or isolated from installation as necessary Yes/NA _____
Calculated strength test pressure (STP) (mbar/bar) _____
Test medium - air, nitrogen, water (hydrostatic test) etc _____
Stabilisation period (minutes) _____
Strength test duration (STD) (minutes) _____
Permitted pressure drop (% STP) _____
Calculated pressure drop (mbar/bar) _____
Findings
Actual pressure drop (mbar/bar) _____
Strength test Pass or Fail _____

Tightness test details

Gas type Natural Gas (NG) Liquefied Petroleum Gas (LPG) _____
Installation type - New (N) - New extension (NE) - Existing (E) _____
Could weather or changes in temperature affect test? Yes*/No _____
Meter type (Diaphragm, Rotary etc.) _____
Meter type (U16, U40, P7 etc) _____
Meter bypass installed Yes/No _____
Installation volume (IV) Gas meter (m³) _____
Installation pipework & fittings (m³) _____
Total IV (m³) _____
Test medium - fuel gas, air _____
Tightness test pressure (TTP) mbar/bar _____
Pressure gauge type (water, high SG, electronic etc.) _____
MPLR† m³/h (IGE/UP/1) or MAPD†† mbar (IGE/UP/1A) _____
Let-by test period existing installations (minutes) _____
Stabilisation period (minutes) _____
Tightness test duration (TTD) (minutes) _____
Any inadequately ventilated areas to check? Yes/No _____
Is barometric pressure correction necessary? Yes/No _____
Findings
Actual leak rate m³/hr** _____
Actual pressure drop (if any) mbar _____
Have inadequately ventilated areas been checked? Yes/NA _____
Tightness test Pass or Fail _____

Purging procedure details

Has a risk assessment been carried out?	Yes/No	<u>YES</u>
Has a written procedure for the purge been prepared?	Yes/No/NA	<u>N/A</u>
Have "NO SMOKING" signed etc been displayed as necessary?		<u>YES</u>
Have any persons in the vicinity of the purge been advised accordingly?		<u>YES</u>
Have all appropriate valves to and from the section of pipe been labelled?		<u>YES</u>
Where Nitrogen gas is being used for an indirect purge have the gas cylinders been checked/verified for their correct content?		<u>YES</u>
Are suitable fire extinguishers available in case of an incident?		<u>YES</u>
Are two way radios (intrinsically safe) available?	Yes/NA	<u>YES</u>
Have all electrical bonds been fitted as necessary?		<u>YES</u>
Calculate purge volume	Gas meter (m ³)	<u>0.035</u>
	Installation pipework & fittings (m ³)	<u>0.924</u>
	Total purge volume (m³)	<u>0.959</u>
Is gas detector/oxygen measuring device as appropriate, intrinsically safe?		<u>YES</u>
Findings		
Complete purge noting final test criteria readings (O ₂ % or LFL%)		<u>1.8%</u>
Purge	Pass or Fail	<u>PASS</u>

INDICATE WORK UNDERTAKEN

Strength test	
Tightness test	
Purge	<u>/</u>

* and ** see overleaf

† Maximum permitted leak rate

†† Maximum allowable pressure drop

DECLARATION OF GAS SAFETY - I confirm that all of the above work described on this form has been satisfactory completed in accordance with the current Gas Safety (Installation and Use) Regulations, industry standards and procedures.

Gas engineers signature W Brooks Responsible person's signature J Mills

Date: 7/9/12

Attention: where additional safety checks have been necessary to ensure the gas system is safe, the responsible person has been informed and has accepted the results. The installation has been left operational.

NOTIFICATION OF UNSAFE GAS INSTALLATION - I confirm that all of the above work described on this form has been satisfactory completed in accordance with the current Gas Safe (Installation and Use) Regulations, industry standards and procedures. However, an unsafe gas installation has been identified, details of which are listed on a separate Warning/Advice Notice.

Gas engineers signature _____ Responsible person's signature _____

Date: _____

INDUSTRIAL GASES (WALES) LTD

INDUSTRIAL GASES (WALES) LIMITED

72 FAIRWATER GROVE WEST LLANDAFF CARDIFF CF5 2JQ TEL: (029) 2055 2111 FAX: (029) 2055 2909

COMPLETION NOTICE

CLIENT

CLARIANT PRODUCTION UK LTD

DATE 28/08/2012

ORDER NO.

4503824361/AE6

ADDRESS

LLANTWIT FARDRE
PONTYPRIDD

DESCRIPTION OF WORK

REMOVE ALL MANIFOLDS, OUTLET POINTS AND
PURGE LINES.

PRINT NAME

MICHAEL MAEINTOSH

SIGNATURE

Mr Maehosh

WORK COMPLETED TO CUSTOMER SATISFACTION

CRANE DOCUMENTATION CHECKLIST

PROJECT	N ₂ SYSTEM REMOVAL	LOCATION	P8
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Date	23 RD OCTOBER 2012
Time of Arrival on site	09:00
Crane Hire company	R. W. CHRISTOPHER
Crane Type/Manufacture	90t FAUN/TADANO
Drivers Licence with photograph (CITB Cert No & Name)	01729405/ W. D. STONE EX. APR 2013
4 Year Quadrennial Certificate (Check Expiry Date & Cert No.)	CERT NO. TCS8092 DATE 17/02/2012
12 month Insurance Certificate (Check Expiry Date & Cert No)	CERT N ^o 1814CPA 29 JULY 2013
Test Certificate for Chains & Slings (Check Expiry Date)	INSPECTED 3/9/12 x 2
Test Certificate for Rope & Block (Check Expiry Date)	INSPECTED 5/10/12
Check Outriggers & Suitable Packing	

Remarks: In inspection document, 1outrigger wear pad adjustment bolt (Rear nearside) has sheaved - confirm that this has been replaced - - on order. Does not affect crane operation

CERTIFICATE FOR ROPE + BLOCK COMES UNDER 12 MONTHLY INSPECTION.

Inspected By:	Jane Mills	Date	23/10/12
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Method Statement

No: CS-12-2192 / MS01 Rev.0

Contract: Clariant		Project No: CS-12-2192
		Rev:
Title: Nitrogen Tank Removal		
Contractor: Air Products plc		
Operation: Depressurise, Decommission & Removal of: <ul style="list-style-type: none"> • 1 x 140CM LIN Storage Tank • 1 x AV24M Product Vaporisers • 1 x Pressure Control Manifold • 1 M3000 Series Membrane System 		
Originator:	Brian Ailsby	Date: 08/10/2012
Approved By:	Brian Ailsby	Date: 08/12/2012
In consultation with:		Date:

Method Statement

1 INTRODUCTION

1.0	GENERAL	
1.1	Contract Manager	Brian Ailsby
1.2	Site Agent	Jane Mills
1.3	General Foreman	Jeff Clements
1.4	Supervisor of Operation	Brian Ailsby
1.5	Safety Advisor	Brian Ailsby
1.6	Emergency Contact (24 hours)	Air Products 24 hour Emergency Technical Service
1.7	Telephone number	0845 6071207
1.8	Drawings to be referred to:	P&ID: N/A
1.9	Proposed Commencement:	Date: 22.10.12 Time: 14:00
1.10	Proposed duration:	1.5 Working Days
1.11	Proposed Days of Work:	Wednesday (pm), Thursday
1.12	Proposed Hours of Work:	14.00 - 17.30 Wednesday, 08:00 – 12:00 Thursday

Method Statement

2 SCOPE

This method statement details the scope, programme and method of work and references all applicable procedures required to:

- a) Depressurise, decommission and remove 140CM LIN Tank & associated equipment.

3 LEGISLATION

The operations within this method statement shall be performed in accordance with:

- a) Health & Safety at Work Act 1974
- b) The Management of Health and Safety at Work Regulations 1999
- c) BS 7121 Safe Use of Cranes and Lifting Operations.
- d) Lifting Operations and Lifting Equipment Regulations 1998.
- e) The Provision and Use of Work Equipment Regulations 1998
- f) Control of Substances Hazardous to Health regulations 2002

4 PERMITS

List permits/work instructions to be issued and include time/stage of issue and name of issuing person/authority.

- | | |
|--------------------------------------|--|
| a) Permit to work | - To be issued by Rapid Response |
| b) Hot Work Permit | - To be issued by Rapid Response |
| c) Lifting Permit | - To be issued by Rapid Response |
| d) Working at Height | - To be issued by Rapid Response |
| e) Multi Task Safety Work Checklist | - To be completed by Air Products |
| f) Lifting Operations Checklist | - To be completed by Air Products / Crane Operator |

5 SECURITY

Detail arrangements for securing the site/working area including provision of locks and keys.

- a) Site to be made available to AP Supervisor.
- b) Site Security by Rapid Response.

Method Statement

6 EMERGENCY COMMUNICATIONS

Detail means of effecting emergency communication from work location i.e., radio to base; fixed telephone; mobile telephone etc., and include location of equipment. List contact names, numbers and call signs and include details for informing all relevant authorities and parties to the contract.

6.1 Mobile Telephones

Brian Ailsby (Principal Engineer) - 07801 178256

6.2 Land Lines

a) Brian Ailsby (Principal Engineer) - 0161 252 4235

b) Engineering Support Team - 0161 776 6033

7 CALL-OUT ARRANGEMENTS

Detail arrangements made for obtaining labour, plant and materials outside working hours in the event of an unforeseen or emergency situation arising. Include list of names, addresses and telephone numbers.

a) Air Products Emergency Technical Service 0845 6071207

8 FENCING

Dimensioned plan to be attached showing layout and to include details of access points for the Contractor and site owner. Position of fencing to be set out and agreed prior to erection. Details of any barriers or screens to be included in this section.

a) NOT APPLICABLE

9 SIGNS

Detail any signs that need to be erected both statutory and informatory and their location.

a) Barrier tapes to be in place prior to lifting operations

b) Temporary warning signs to be used for work in progress, hot work and pressure testing.

Permanent product hazard warning boards to be erected on completion.

10 SERVICES

List all services which are shown/expected to be within the working area and the drawings on which they are referred to. Detail the methods to be used to trace each service and how each will be marked and subsequently exposed to prove their position. Detail how those services which may be affected by the works will be protected/supported/diverted to ensure that they remain in service and suffer no damage.

a) Refer to Drawing number: N/A

b) Employees and Subcontractors advised verbally during craneage survey.

c) Provided drawings relevant to their working area: N/A

Method Statement

11 HAZARDS

Detail any other known/anticipated hazards and includes safety precautions to be observed and the method by which those persons who may be at risk will be advised of the risk and the action that they are required to take. This section should include both existing hazards e.g., gases (methane, chlorine, oxygen etc), and also those that may be created by the construction work e.g., activities (welding, solvents, noise, flame cutting).

11.1 Risk assessments:

Risk assessments relevant to the proposed operation shall be attached.

Gen Op	General Operations Risk Estimation
UK-RA0502	Cryogenic Tank & Vaporiser Removal.
UK-RA0310	Lift Operations Major Equipment
Lifting Operation	Crane Hire Method Statement / Risk Assessment

11.2 Risk Analysis / Safety Assessment

a) Manual Handling

Manual handling is restricted to the carrying of hand tools, pipe sections and gas cylinders. This will comply with the manual handling training received

b) Slips, Trips and Falls

Good housekeeping of work area

c) Power Tools

All portable tools and equipment used on site will be within test period and suitably marked.

d) Use of cutting equipment

All gas control & brazing equipment will be of sound construction, within test date (where relevant) and of the correct pressure rating.

e) Pressure Hazards / Venting

All venting shall be carried out in a safe and controlled manner with access to the area restricted by tape and signs. Venting shall be carried out in accordance with Air Products procedures.

f) Site traffic

All traffic to follow site traffic plan. Area to be cordoned off during work.

g) General

Air Products operates a system of self completing permit to work for the field based technician. At the start of each work shift the site conditions, Method Statement and process conditions will be checked and the checks recorded

h) Product Data Sheets

Product Data Sheet for Nitrogen

Method Statement

16 WELFARE FACILITIES

State welfare facilities to be provided and their location.

- a) Personnel and subcontractors to be allowed use of existing on site facilities.

17 WEATHER

Detail the effects that various weather conditions may have on the planned operation, include details of criteria (forecast or actual) that would lead to postponement i.e., rain (high sewage flows/levels); drought (high consumption/low level); tide; frost (materials unusable) etc.

- a) High winds or electrical storms may impact crane operations

18 REINSTATEMENT

Detail proposed reinstatement to be carried out stating whether none/temporary/permanent, time of carrying out work and materials to be used, (if none state protection to be provided).

- a) Air Products standard Operational Readiness Inspection (ORI) Procedure
- b) Operating Pressure & System Supply Pressure as per Project Instructions

Method Statement

19 METHOD

All lifting operations detailed below and access to the plinth shall be controlled by Crane Contractors Appointed Person, in line with Method Statement.

Air Products Supervisor shall monitor the operation and stop any actions deemed unsafe or conflicting with this method statement or procedures.

ITEM	DESCRIPTION	PLANT & EQUIPMENT	REMARKS
1.	Obtain permits to work.		Clariant
2.	Attend Site Induction		Clariant / Air Products
3.	Complete multi task safety work checklist		Air Products
4.	Inspect all new equipment. Any damage to reported to Project Engineer before continuing with installation		Air Products.
5.	Review method statements and crane berth plan		Clariant / Air Products
6.	Depressurise and Decommission 140CM Storage Tank and associated equipment	Disposal Vaporiser Gloves, Eye / Ear protection	Air Products
7.	Complete Checklist for Use of Lifting Equipment and carry out Tool Box Talk		Air Products / Crane Contractor.
8.	Cordon off lifting area to all unauthorised personnel.	Barrier Tape	
9.	Crane contractor to set up crane as per agreed berthing plan.	Baldwin Cranes Hand Tools	Crane Contractors Personnel
10.	Lift and Removal of 140CM Storage Tank Under the control of the Lift Supervisor & detailed in Crane Method Statement: <ul style="list-style-type: none"> • Connect slings to 140CM Storage tank. • Check all tank connections are removed • Under control of lift supervisor, remove 140CM Storage tank, position and secure on transport vehicle • Disconnect slings when tank secure • Under control of lift supervisor, remove 2 x AV24M Vaporisers, position and secure on transport vehicle • Disconnect slings when vaporisers are secure 	Rapid Response Cranes Hand Tools	Rigger Crane Method Statement Fall arrestor to be use while working at height.
11.	Transport to site, leave once loaded.		
12.	Crane to de-rig, sign off permits leave site	Rapid Response Cranes	Reversing operations to be conducted under supervision.

Method Statement

ITEM	DESCRIPTION	PLANT & EQUIPMENT	REMARKS
13.	<p>MEMBRANE DECOMMISSION</p> <p>Customer to isolate and remove all incoming cables to the compressor and membrane prior to removal date</p> <p>Depressurise Nitrogen Receiver and make safe.</p> <p>Make sure that the compressor and Membrane are properly secured on transport vehicle prior to leaving site. Use tarpaulin to cover both items for transporting.</p>		<p>Customer.</p> <p>AP</p>
14.	<p>Secure work area, clear site of barriers, close out all work permits with customer and leave site</p>		

Method Statement

21 APPENDIX 1

21.1 Appendix One: Customer Supporting Documentation

- a) Method Statements
 - i) Crane Contractors Method Statement
- b) Risk Assessments
 - i) UKP-RA001 General Operations Risk Estimation
 - ii) UK-RA0502 Tank & Vaporiser Removal.
 - iii) UK-RA0310 Lift Operations Major Equipment



UKP-RA001.doc



UK-RA0502.doc



UK-RA0310 Lifting Operations.doc

21.2 Appendix 2: Removal Team Documentation

Documents Issued to Installation Team in addition to this Method Statement:

Complete Safety Work Permit / Multi Task Checklist (if applicable) prior to commencing any activities.		
Documentation		
Drawings		
Parts List		
P&ID	✓	
Pressure Test Forms		
Lifting Equipment Checklist	✓	
Operational Readiness Inspection		
User Manual		Electronic copy sent to customer
Product MSDS		Electronic copy sent to customer
Customer Acceptance Certificate	✓	
PSSR Documentation		
Crane Method Statement	✓	

PREPARED BY :
B. Ailsby / P. Street / D. Henshall /
M. Costin / R. Walker



NUMBER : UKRA0502

PAGE : 1 of 3

REVIEWED BY : David Owen

DATE REVISED: 15th June 2010

DATE ISSUED : 22/6/2010

REVISED BY:
B. Ailsby / R. Walker / J. Chapman /
A. Mellor / R. Whitehead

**RISK ASSESSMENT
(JOB SAFETY ANALYSIS)**

LOCATION: UK Customer Engineering Customer Site

WORK / TASK DESCRIPTION: Tank & Vaporiser Removal

MINIMUM STANDARD PPE REQUIRED: Hard Hat, Safety Glasses, Safety Shoes, Coveralls, Gloves, Hi-Visibility Jacket, Oxygen Monitor

PPE AS REQUIRED: Ear Protection

RELATED ASSESSMENTS: UKRA0415 Tank Decommissioning & Decanting
UKRA0310 Lifting Operations Major Equipment
03.17.09AN Crane lifting Procedure for Customer Station Tanks & Equipment

<u>No.</u>	<u>Activity Steps</u>	<u>Potential Hazard</u>	<u>Potential Harm</u>	<u>Control Measures/ Recommendations</u>	<u>In Place</u>
1	Report to site. Obtain work permits. Carry out site inductions. Ensure all approvals are in place along with approved documentation: (MOC, P&ID, Method Statement, COSHH, MSDS, Work Instructions, Cessation of supply etc).	MH01 Slips trips & falls MH03 Safe Area of Work & Access MH31 Manoeuvring vehicles	Low probability Daily exposure Minor / major injury Property damage Equipment damage	Training Work planning Site emergency procedures Safe systems of work	Yes
2	Identify / check work area Assemble tools / materials. Complete Checklist For Use of Lifting Equipment and carry out tool box talk.	MH01 Slips trips and falls. MH03 Safe Area of Work & Access MH05 Cold Environment MH11 Health Chronic Noise Level MH14 Health Acute Eye Injury MH21 Use of Sharp Tools & Hand Tools MH31 Manoeuvring vehicles MH32 Manual Handling Loading / unloading vehicles MH45 Contact sharp edges	Low probability Daily exposure Minor / major injury. Property damage Equipment damage	Training Qualified Personnel Work planning Safe systems of work	Yes

PREPARED BY :
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M. Costin / R. Walker



NUMBER : UKRA0502

PAGE : 2 of 3

REVIEWED BY : David Owen

DATE REVISED: 15th June 2010

DATE ISSUED : 22/6/2010

REVISED BY:
B. Ailsby / R. Walker / J. Chapman /
A. Mellor / R. Whitehead

**RISK ASSESSMENT
(JOB SAFETY ANALYSIS)**

<u>No.</u>	<u>Activity Steps</u>	<u>Potential Hazard</u>	<u>Potential Harm</u>	<u>Control Measures/ Recommendations</u>	<u>In Place</u>
3	Removal of product by decanting or venting. A residual pressure of 0.5 barg to be maintained in tank.	LOX will not be decanted. LIN / LAR require product analysis prior to decanting (O ₂ & moisture) Liaise with Distribution.		Refer to UKRA0415.	Yes
4	Disconnect power and telephone lines if appropriate.	MH01 Slips trips and falls. MH03 Safe Area of Work & Access MH18 Electrical Energy Work with Exposed Live Conductors MH19 Electrical Energy Damage to electrical equipment MH21 Tools Use of sharp tools and hand tools. MH45 Contact sharp edges	Low probability Daily exposure Minor / major injury. Property damage Equipment damage	Training Qualified Personnel Work planning Safe systems of work	Yes
5	Depressurise system pipework. Disconnect all interconnecting pipework between tank outlet and customer pipeline. Seal all open ends on cryogenic tank, vapourisers and houselines.	MH01 Slips trips and falls. MH03 Safe Area of Work & Access MH05 Cold Environment MH11 Health Chronic Noise Level MH14 Health Acute Eye Injury MH21 Use of Sharp Tools & Hand Tools MH31 Manoeuvring vehicles MH34 Manual handling of goods MH45 Contact sharp edges	Low probability Daily exposure Minor / major injury. Property damage Equipment damage	Training Qualified Personnel Work planning Safe systems of work	Yes
6	Position cranes, remove heavy equipment, lay tank and vapourisers to horizontal, load to transport. Ensure that all equipment is adequately supported. Fully complete tank traveller.			Refer to UK-RA0310 & Crane Operator Method Statement / Risk Assessment.	Yes

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 M. Costin / R. Walker



NUMBER : UKRA0502

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**RISK ASSESSMENT
 (JOB SAFETY ANALYSIS)**

No.	Activity Steps	Potential Hazard	Potential Harm	Control Measures/ Recommendations	In Place
7	Tidy site, complete documentation as necessary, leave site.	MH01 Slips trips & falls MH03 Safe Area of Work & Access MH31 Manoeuvring vehicles MH32 Manual Handling Loading and unloading of vehicles.	Low probability Daily exposure Minor / major injury Property damage Equipment damage	Training Work planning Safe systems of work	Yes

Recommended Actions:					
	Activity Steps	Recommendation	Responsible	Due Date	Date Completed & Signature

PREPARED BY:
J. Roynon / P. Street

REVIEWED BY: D Owen

DATE ISSUED: 27/7/2010



NUMBER : UKRA0310

PAGE : 1 of 5

DATE REVISED : 13th July 2010

REVISED BY :

B. Ailsby / R. Walker / J. Chapman
A. Mellor / S. Crawford

DATE REVISED: 13th July 2015

**RISK ASSESSMENT
(JOB SAFETY ANALYSIS)**

LOCATION: UK Customer Engineering Customer Site

WORK / TASK DESCRIPTION: Installation of Major Equipment, including Lifting Operations

MINIMUM STANDARD PPE REQUIRED: Hard Hat, Safety Glasses, Safety Shoes, Coveralls, Gloves, Hi-Visibility Jacket, Oxygen Monitor

PPE AS REQUIRED: Ear Protection

RELATED ASSESSMENTS:

<u>No.</u>	<u>Activity Steps</u>	<u>Potential Hazard</u>	<u>Potential Harm</u>	<u>Control Measures/ Recommendations</u>	<u>In Place</u>
1	Report to site. Obtain work permits. Carry out site inductions. Ensure all approvals are in place along with approved documentation (MOC, Drawings, Method Statement, COSHH, Work Instructions etc).	MH01 Slips trips & falls MH03 Housekeeping MH31 Manoeuvring vehicles	Low probability Daily exposure Minor / major injury Property damage Equipment damage	Training / Competency Work planning Site emergency procedures Safe systems of work	Yes
2	Identify / check work area Assemble tools / materials. Complete safety work checklist	MH01 Slips trips & falls. MH03 Housekeeping MH31 Manoeuvring vehicles MH32 Loading / unloading vehicles MH34 Manual handling MH45 Contact sharp edges	Low probability Daily exposure Minor / major injury. Property damage Equipment damage	Training / Competency Work planning Safe systems of work	Yes
3	Review Method statement, Berthing Study & Installation drawings with crane contractor and customer	MH01 Slips trips and falls. MH03 Housekeeping	Low probability Daily exposure Minor / major injury.	Training / Competency Work planning Safe systems of work Legislation	Yes
4	Complete lifting operations checklist	MH01 Slips trips and falls. MH03 Housekeeping MH34 Manual handling	Low probability Daily exposure Minor / major injury.	Training / Competency Work planning Procedures Safe systems of work Legislation	Yes
5	Set up cranes, position transport and prepare for lift. Barrier off Work Area.	MH01 Slips trips and falls. MH02 Falling objects MH03 Housekeeping MH23 Moving equip. MH31 Moving vehicles MH32 Manual handling	High probability Daily exposure Minor / major injury. Equipment damage. Property damage	Training / Competency Work planning Safe systems of work, PPE Method Statements Use of contract lift	Yes

PREPARED BY:
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REVIEWED BY: D Owen

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DATE REVISED: 13th July 2015

**RISK ASSESSMENT
(JOB SAFETY ANALYSIS)**

<u>No.</u>	<u>Activity Steps</u>	<u>Potential Hazard</u>	<u>Potential Harm</u>	<u>Control Measures/ Recommendations</u>	<u>In Place</u>
		MH43 Contact fixed objects MH49 Lifting & positioning equipment using cranes MH50– Use of Lifting Equipment		supervised by Appointed Person, crane Method Statement / RA, berthing diagram, FUE010 Checklist For Use of Lifting Equipment	
6	Prepare equipment to be lifted. Attach lifting tackle / remove restraining straps	MH01 Slips trips and falls. MH02 Falling objects MH03 Housekeeping MH23 Moving equipment. MH32 Manual handling MH44 Working at Height MH49 Lifting & positioning equipment using cranes MH50 Use of lifting tackle	High probability Daily exposure Minor / major injury. Equipment damage. Property damage	Training / Competency Work planning Safe systems of work, PPE Method Statements Use of contract lift supervised by Appointed Person, crane Method Statement / RA, berthing diagram, FUE010 Checklist For Use of Lifting Equipment	Yes
7	Lift equipment into position.	MH01 Slips trips & falls. MH02 Falling objects MH03 Housekeeping MH23 Moving equip. MH49 Lifting & positioning equipment using cranes MH50 Use of lifting tackle	High probability Daily exposure Minor / major injury. Equipment damage. Property damage	Training / Competency Work planning Safe systems of work, PPE Method Statements Use of contract lift supervised by Appointed Person, crane Method Statement / RA, berthing diagram, Authorised personnel only. FUE010 Checklist For Use of Lifting Equipment	Yes
8	Mark anchor points and move equipment aside (if required)	MH01 Slips trips & falls. MH02 Falling objects MH03 Housekeeping MH23 Moving equipment. MH49 Lifting & positioning equipment using cranes	High probability Daily exposure Minor / major injury. Equipment damage. Property damage	Training / Competency Work planning Safe systems of work, PPE Method Statements Use of contract lift	Yes

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**RISK ASSESSMENT
(JOB SAFETY ANALYSIS)**

<u>No.</u>	<u>Activity Steps</u>	<u>Potential Hazard</u>	<u>Potential Harm</u>	<u>Control Measures/ Recommendations</u>	<u>In Place</u>
		MH50 Use of lifting tackle		supervised by Appointed Person, crane Method Statement / RA, berthing diagram, FUE010 Checklist For Use of Lifting Equipment Authorised personnel only.	
9	Drill holes and install anchors as required.	MH01 Slips trips & falls. MH03 Housekeeping MH06 Use of hazardous chemicals MH07 Use of hazardous chemicals MH12 Power tools MH13 Vibration MH14 Eye injury MH19 Electrical Equipment - Electrocutation MH21 Sharp tools MH22 Entanglement MH43 Contact fixed objects MH46 Portable electric tools	High probability Daily exposure Minor / major injury. Equipment damage. Property damage	Training / Competency Work planning Safe systems of work, PPE Method Statements PAT testing COSHH / MSDS. Authorised personnel only.	Yes
10	Reposition equipment Level / shim / pack, and secure anchors.	MH01 Slips trips falls. MH02 Falling objects MH03 Housekeeping MH21 Use of hand tools MH23 Moving equipment MH32 Manual handling MH43 Contact fixed objects MH45 Contact sharp edges MH49 Lifting & positioning equipment using cranes MH50 Use of lifting tackle	High probability Daily exposure Minor / major injury. Equipment damage. Property damage	Training / Competency Work planning Safe systems of work, PPE Method Statements Authorised personnel only.	
11	Disconnect lifting tackle. No Personnel in area during disconnection of lifting tackle.	MH01 Slips trips & falls. MH02 Falling objects MH03 Housekeeping MH23 Moving equipment. MH32 Manual handling MH44 Working at heights	High probability Daily exposure Minor / major injury. Equipment damage. Property damage	Training / Competency Work planning Safe systems of work, PPE Method Statements Use of contract lift	

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REVIEWED BY: D Owen

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AIR PRODUCTS 
UK CUSTOMER
ENGINEERING

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DATE REVISED: 13th July 2015

**RISK ASSESSMENT
(JOB SAFETY ANALYSIS)**

<u>No.</u>	<u>Activity Steps</u>	<u>Potential Hazard</u>	<u>Potential Harm</u>	<u>Control Measures/ Recommendations</u>	<u>In Place</u>
		MH50 Use of lifting tackle		supervised by Appointed Person, crane Method Statement / RA, berthing diagram, FUE010 Checklist For Use of Lifting Equipment Authorised personnel only.	
12	Repeat steps 6 to 11 as required for all further lifts.				
13	De-rig cranes.	MH01 Slips trips and falls. MH02 Falling objects MH03 Housekeeping MH23 Moving equip. MH31 Moving vehicles MH32 Manual handling MH43 Contact fixed objects	High probability Daily exposure Minor / major injury. Equipment damage. Property damage	Training / Competency Work planning Safe systems of work, PPE Method Statements Use of contract lift supervised by Appointed Person, crane Method Statement / RA, berthing diagram, FUE010 Checklist For Use of Lifting Equipment	Yes
14	Replace tools and equipment and clear site.	MH01 Slips trips and falls. MH03 Housekeeping MH31 Manoeuvring vehicles MH32 Loading / unloading vehicles MH34 Manual handling MH45 Contact sharp edges	Low probability Daily exposure Minor / major injury. Property damage Equipment damage	Training / Competency Work planning Safe systems of work	Yes

Recommended Actions:

Activity Steps	Recommendation	Responsible	Due Date	Date Completed & Signature

Hazard Record Sheet Risk Estimation Framework	Assessment Date & Revision: 8/5/01 Revision 2 21/4/06 Revision 3 Addition of additional tasks plus full review of content	Assessor / Team : M. Snape, G. Lloyd, G. Worthy, P. Osmond, D. Williams, Sudlow Associates Rev 2 : M. Snape / D. Williams Rev 3: M Haycock / M Anderson	Reviewer D. Williams - UK SH&E Manager
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Title : General Operations Risk Estimation

Type of Persons Affected : Maintenance & Project Staff, Site Personnel, Air Products Approved Contractors

Tasks	Potential hazard or Hazardous situation	Potential Risk Factor		Existing Control Measures	No of Persons affected.	Residual Risk Factor		New Requirement	
		Hazard Severity	Probability Frequency (P)	RF H/M/L None		Hazard Severity (H)	Probability Frequency (P)	RF H/M/L None	Yes / No
MH1 Housekeeping Slips and trips	Poor Housekeeping Moveable Obstructions Fixed Obstructions Ground conditions	5	4	20 Medium	1	5	2	10 Low	No
	Climate conditions ice/rain	5	3	15 Medium	1	5	1	5 Low	No
	Ladders / Platforms / Steps (Fall to ground level)	9	1	9 Low	1	9	1	9 Low	No

MH2 Contact Objects Falling	Overhead lifting operations	9	3	27 Medium	Training & PPE. Appointed person. Procedures. Exclusion zones. Tool box talks Basic Safety Process (APTs)	2	9	1	9 Low	No
	Working in vicinity of raised platforms / Ladders	9	3	27 Medium	Training & PPE. Construction Regulations. Exclusion zones. Basic Safety Process (APTs)	1	9	1	9 Low	No
MH3 Housekeeping Safe area of work and access	Congested area. Limited access / egress	5	4	20 Medium	Training. Cordon off working areas. Specific hazards identified and actioned. Basic Safety Process (APTs) Work Permits	1	5	2	10 Low	No
	Working on site under construction	5	3	15 Medium	Training. Cordon off working areas. Specific hazards identified and actioned. Basic Safety Process (APTs) Work Permits	1	5	2	10 Low	No
MH4 General Confined Spaces	Working in roof voids	9	2	18 Medium	Training & PPE Work Permit Entry Specific Risk Assessment Personal O2 Monitor	1	9	1	9 Low	No

	Food Machine GGG	9	3	27 Medium	Training & PPE Work Permit Entry Specific Risk Assessment Personal O2 Monitor	1	9	2	18 Low	No
	Asphyxiation	9	2	18 Medium	Confined Space Permits. Training. Procedures. Safety checklist. Escape plans.	1	9	1	9 Low	No
MH5 General Cold environment	Cryogenic fluid	5	4	20 Medium	Training & PPE. Procedures Basic Safety Process (APTs) Driver Observation Reports re leaks	1	5	2	10 Low	No
	Contact with cold surfaces/ice	4	4	16 Medium	Insulation / design Training & PPE. Procedures Basic Safety Process (APTs) Customer onus to deice	1	4	2	8 Low	No
	Vapour cloud / Asphyxiation	9	4	36 Medium	Training & PPE. Procedures Basic Safety Process (APTs) Personal O2 monitor	1	9	1	9 Low	No

MH6 MH7 Health Chronic Hazardous chemicals skin irritation	Use of solvents, paints, cleaning agents, epoxy resin, & brazing flux.	4	3	12 Medium	Purchase of pre- cleaned equipment where possible. Training & PPE. COSHH assessments. Basic Safety Process (APTs)	1	4	1	4 Low	No
MH8 Health Chronic Repetitive strain	(See MH12, MH13 for vibration related, See MH34, MH35 for manual handling)									
MH9 Health Chronic Fumes	Inhalation of fumes and effect of fumes on eyes from brazing / welding	4	3	12 Medium	Adequate ventilation. Training & PPE. COSHH assessments. Material selection.	1	4	1	4 Low	No
	Inhalation of VOCs	4	3	12 Medium	Adequate ventilation. Training & PPE. COSHH assessments. Material selection.	1	4	1	4 Low	No
MH10 Fire Hazards Creation of flammable gases	Hot work in vicinity of Solvents	5	1	5 Low	Training & PPE.. Hot work permits	1	5	1	5 Low	No
MH11 Health Chronic Noise levels	System venting	4	4	16 Medium	Design (vent silencers). Training & PPE. Noise hazard signs & exclusion zones. Noise monitoring	1	4	1	4 Low	No
	Installed machinery & equipment.	4	3	12 Medium	Design. Equipment selection. Training & PPE. Noise monitoring	1	4	1	4 Low	No
	Environmental	2	6	12 Medium	Training & PPE. Exclusion areas. Noise monitoring	1	2	1	2 Low	No

MH12 MH13 Health Chronic Vibration	Power tool operations	4	4	16 Medium	Training & PPE. Use of appropriate equipment. Health screening Basic Safety Process (APTs)	1	4	3	12 Medium	Yes See Pt 2 below
MH14 Health Acute Eye injury	Drilling, welding Cutting operations. Uncontrolled gas release. Incorrect use of hand tools	5	4	20 Medium	Training & PPE Pre use inspection of tools Work Permits Basic Safety Process (APTs)	1	5	1	5 Low	No
MH15 Health Chronic Radioactive material	Radiographic inspection & exposure	2	6	12 Medium	Use of specialist contractors. Protective screens / exclusion areas. Legislative requirements. Procedures. Method statements.	1	2	1	2 Low	No
MH16 Health Acute U.V. light	Eye & skin irritation from welding and exposure	2	3	6 Low	Training & PPE. Procedures. Mobile screens.	1	2	1	2 Low	No
MH17 Equipment / Machinery / vehicles (E/M/V) Display Screen Equipment	Eye Irritation / tiredness, headaches	2	8	16 Medium	Display Screen Assessments for all identified users and follow up for any identified issues by trained individuals Training on DSA	1	2	4	8 Low	No DSA must be current to ensure compliance

MH18 Electrical Energy Work with Exposed Live Conductors	Equipment testing / fault finding Machine installation	9	3	27 Medium	Training & PPE. Qualification / competency. Procedures. Equipment selection & design.	1	9	1	9 Low	No
MH19 Electrical Energy Damage to electrical equipment	Electrocution and/or fire caused by human interference	9	3	27 Medium	Training. Circuit protection. Housekeeping. Design / installation. Safety testing prior to commencement of work	1	9	1	9 Low	No
MH20 E/M/V Incorrect installation of equipment	Mechanical system installation	10	4	40 High	Training & PPE. Inspection. Legislative requirements. Design considerations Appointed persons for lifting	2+	16	2	12 Low	No
	Pneumatic Equipment	6	3	18 Medium	Training & PPE. Inspection. Legislative requirements. Design considerations Pressure test guidelines	2	6	1	6 Low	No
	Electrical system installation	9	3	27 Medium	Training & PPE. Inspection. Legislative requirements. Design considerations. Isolation Using qualified personnel	1	9	1	9 Low	No

MH21 Tools Use of sharp tools and hand tools.	Mechanical / Electrical tasks	4	8	32 Medium	Training & PPE. Equipment selection. Equipment audit & inspection. Pre use inspection Annual van audits by management	1	4	2	8 Low	No
MH22 E/M/V Entanglement with rotating machinery.	Working in vicinity of rotating equipment and use of power tools. Compressors, fans, motors, belkts	5	4	20 Medium	Training & PPE. Safety interlocks & guards. Equipment audit & inspection. Preventative maintenance. Legislation & design. Isolation and lock out	1	9	1	9 Low	No
MH23 E/M/V Traps in moving parts of machinery	Working in vicinity of moving equipment	5	4	20 Medium	Training & PPE. Safety interlocks & guards. Equipment audit & inspection. Preventative maintenance. Legislation & design. Isolation and lock out	1	9	1	9 Low	No
MH24 E/M/V Access to dangerous parts of machinery	(See MH22 & MH23)									

MH25 Fire Hazards Fire potential of combustible materials.	Hot work or LOX release	10	2	20 Medium	Training. Good housekeeping. Material Selection & Design. Safety checklist. Hot work permits	2	10	1	10 Low	No
MH26 Fire Hazards Fire potential of flammable fluids	Uncontrolled ignition eg solvents, oils, gases	10	2	20 Medium	Training. Good housekeeping. Codes of practice. Safety checklist. Hot work permits Equipment selection ATEX compliance	2	10	1	10 Medium	No
MH27 Fire Hazards Spraying of flammable liquids	(See MH26)									
MH28 Fire Hazards Use of flammable gas cylinders	(See MH26 for uncontrolled ignition, MH33 for storage, MH34 for manual handling)									
MH29 E/M/V Operation of FLT.	Personnel injury & damage to property & equipment	9	4	36 High	Training & PPE. Maintenance & certification. Hazard warning systems. Restricted areas. Regular assessments Non Customer engineering activityu	2	9	0	0 Low	No

MH30 E/M/V Dangers from reversing vehicles.	(see MH31)									
MH31 E/M/V Dangers from manoeuvring of vehicles.	Personnel injury & damage to property & equipment	9	4	36 High	Training & PPE. Hazard warning systems. Marshalling. Restricted areas. Regular assessments Van used as barrier	1	9	1	18 Low	No
MH32 Manual Handling Loading and unloading of vehicles.	(See MH2 for craneage, MH29 operation of FLT, MH33 for loading)									
MH33 Housekeeping Safe storage and stacking of goods	Unstable or insecure equipment.	5	1	5 Low	Training & PPE. Exclusion zones. Restraining devices. Good Housekeeping.	2	5	1	5 Low	No
MH34 Manual Handling Manual handling of goods	Personal injury	4	6	24 Medium	Training & PPE. Manual handling assessments.	1	4	2	8 Low	No
	Taking goods from one place to another	5	4	20 Medium	Training. Method statements. Manual Handling Assessment Equipment design.	2	5	1	5 Low	No

MH35 Environment Waste Materials	Management of waste materials and minimisation	2	3	12 Medium	Waste Management Plan. Environmental Training. Approved Waste contractors used for disposal.	2	2	1	2 Low	No
MH36 Release of Energy Compressed gas hazards.	Uncontrolled release of pressure.	9	4	36 High	Training & PPE. Design & material selection PSSR compliance Isolation and lock out	1	9	1	9 Low	No
MH37 Release of Energy Failure of pressure vessels	Personal injury & damage to property & equipment	10	1	10 Low	Training. Design codes. PED compliance Inspection & maintenance.	2	10	1	10 Low	No
MH38 Tools Incorrect use of hand tools	(See MH 21)									
MH39 Health Acute Food hygiene hazards	(See MH7 for cleaning agents) Health hazard	10	3	30 High	Training & PPE. Health hygiene regulations. Cleaning of machines prior and post maintenance	1	5	1	5 Low	No
MH40 Contact Contact with hot or cold objects and surfaces.	See MH5									

MH41 Health Acute Poor shift pattern. Excessive hours	Potential health hazards and property/equipment damage	10	3	30 High	Training. Routine maintenance. Work planning. Health screening .	1	10	1	10 Low	No
MH42 Environmental Spills Emissions and Emergency Controls	Emission into environment, noise and or material release. (See MH11 for Noise controls, MH6 & MH7 for COSHH, MH9 for exhaust gases)									
MH43 Contact Fixed Objects	Contact with fixed Equipment, sharp corners, valve stems, geometry etc	5	4	20 Medium	Training & PPE. Equipment design Use of high visibility hazard notices / markings. Bump stops. Exclusion zones	2	5	2	10 Low	No
MH44 General Working at Heights	Slips / Trips Securing Load Fall protection Food freezers Generators (See MH1 and MH2)	9	3	27 Medium	Training PPE Specific risk assessments	1	9	1	9 Low	No
MH45 Contact Sharp Edges of Materials	(For tools see MH21 for fixed objects see MH43)									
MH46 Tools (portable) Using Portable Electric Tools	(For contact hazards see MH21, for electrical hazards see MH18)									

MH47 Tools (portable) Using Portable Pneumatic tools	(For contact hazards see MH21, for compressed air hazards see MH36)									
MH48 E/M/V Stored Energy from Accumulators or Capacitors	Electric shock from release of stored energy	9	3	27 Medium	Training / qualifications Competency Qualified persons PPE Design and selection of Equipment	1	9	1	9 Low	No
MH49 E/M/V Operating Overhead / Jib Crane	Lifting & positioning of equipment by crane	9	3	27 Medium	Training & PPE. Appointed persons Contract lifts Cranage Method Statement. Exclusion zones Toolbox talks Work permits	1	9	1	9 Low	No
MH50 E/M/V Carrying / Lifting Operations using Lifting Tackle	Use of Lifting Tackle (For Manual handling of equipment see MH34)	9	3	27 Medium	Training & PPE. Appointed persons Contract lifts Cranage Method Statement. Exclusion zones Toolbox talks Work permits	1	9	1	9 Low	No
MH51 Release of Energy Pressure Testing Hazards	(See MH36)									

MH52 Release of Energy High Pressure Cylinders	(See MH36)									
MH53 Environment General Hazards Air / Land / Water	(See MH35 and MH42)									
MH54 General Molten Metal	Welding, brazing	4	3	12 Low	Welding / brazing qualification. PPE Hot work permit	1	4	1	4 Low	No
	Charging / Tapping Furnace	9	1	9 Low	Training & PPE. Exclusion Zones Customer responsibility to break into furnance wall	1	9	1	9 Low	No

	Action	Owner	Date	Date Completed
1.	Annual ladder inspection to be performed during van audits and filed.	M Haycock/G Leigh	Annually	
2.	Contact EHS concerning the measurement and impact of regular use of power tools in respect to vibration injuries.	M Haycock	End May 06	
3.	Generate MEP for customer stations	M Haycock/M Anderson	End FY06	
4.				
5.				



Site Survey Report



Customer: Air Products PLC Customer tel: 01270 614316

Customer address: _____ Customer fax: 01932 258949

2 Millenium Gate
Westmere Drive Quote contact name: Brian Ailsby

Crewe
CW1 6AP E-Mail Address: _____

Site survey No: RRS3249 Tanks Uplift Site Contact: Jane Mills

Site Contact Number: 1443219754

Tank ID : _____ Survey date: 24/09/2012

Site address: _____

Clariant Time of survey: 09:30

Llantrisant Road

Pontypridd

CF38 2SN Initiated By: John Duffield

Job type

Details from the customer prior to carrying out a site survey:

Scope of works:

Contract lift, to uplift two tanks and one vaporiser
Transport , 140CM and vaporiser to be delivered to CTM Cardiff the PSA
system air receiver tank to go to Grimsby

Labour

	Number	Days		Number	Days
Lift Supervisor	1	1			
Slinger/signaller	1	1			

Descriptions of equipment to be moved

Description	Length (mm)	Width (mm)	Height (mm)	Weight (kg)
140CM	7,300	2,760		10.360kg
Vaporiser	2,000	1,200	5,600	1,500kg
Air Receiver		1,500	10,000	5,500kg approx

Lifting / moving equipment:

	Number	SWL	EWL		Number	SWL	EWL
Riggers van, fully equipped	0			Nylon endless sling	6	10t	2m
Packing timbers	0			Shackles	4	9t&17t	
1/2 sleepers	0						
Full sleepers	12			Boson's chair	1		
Chain slings	0			RADIOS	0		

Site / ground conditions

Site approach

A road	Yes	Site road	Yes
B road	No	Ind Estate	No
Adequate turning	Yes	Heavy traffic	No
Low bridges		Parked cars	No

Site access

Tarmac road	Yes	Compacted stone	No
Concrete road	Yes	Uncompacted track	No
Width restriction	No	Height restriction	No
Largest vehicle		Track way required	No

Berthing position

	Condition	protection required
Tarmac / concrete	OK	Yes
Compacted stone		
Block paving		

Berthing hazards

Railway lines	No	Railway cables	No
Electrical cables	No	Electrical pylon	No
Telephone cables	No	Underground cables	No
Manholes	No	Service ducts	Yes
Underground carpark	No	Underground cellars	No
Pedestrians	No	Shops	No
Street furniture	No	Roads	No

Additional ground protection

		amount			amount
Aluminium trackway	No		Fibre board	No	
3 x 1.2x 200mm mat	No		3 x 1.2 x 70mm mat	No	
1 x 1.2 x 70mm mat	No		Nylocast mat	Yes	4

Point loadings

Worst case point loadings: 46,000kg approx

Worst case with protection as stated above 38,333kg approx

Notes regarding ground hazards

Crane report

	Main crane, (MC)	Tailing crane, (TC)
Centre of crane to edge of foundation slab	8m	13,5m
Edge of slab to centre of load	2,77m	3m
Maximum radius	10,77m	16.5m
Crane make	Demag 80t AT	Grove 50t AT
Crane model	AC80-2	GMK3050-1
Outrigger base	7m	6,2m
Main boom length	25m	38m
Counterweight	18t	11,6t
Crane specification	19t at 10,77m	5,8t at 16,5m
Alternative Crane	80t Grove	35t terex long boom
Reason for crane choice	wieght at radius	boom length

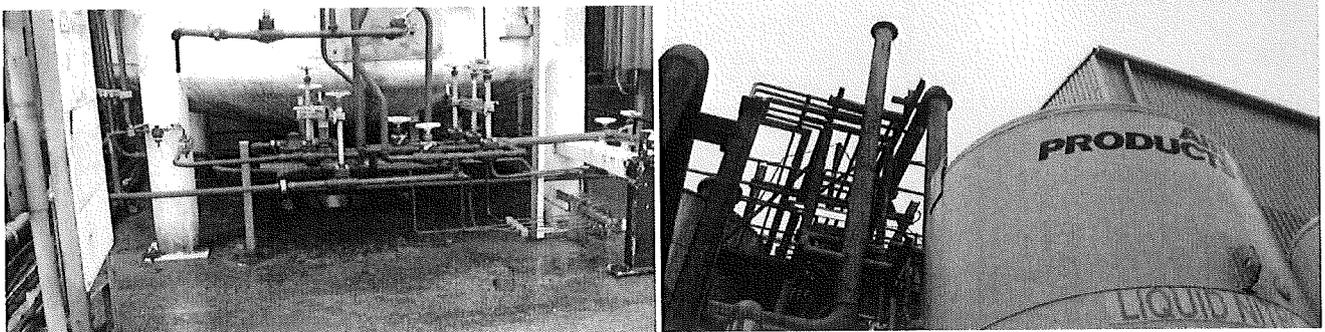
Transportation

Type	Number	Del / Col / exchange, etc
Artic (Crane assisted transport) CAT with 40ft flat trailer	0	
Artic unit with step frame trailer c/w hiab	0	
Artic unit c/w 40ft flat trailer	2	
Rigid 6 wheeled c/w CAT	1	
Rigid 6 wheeled flat bed	0	

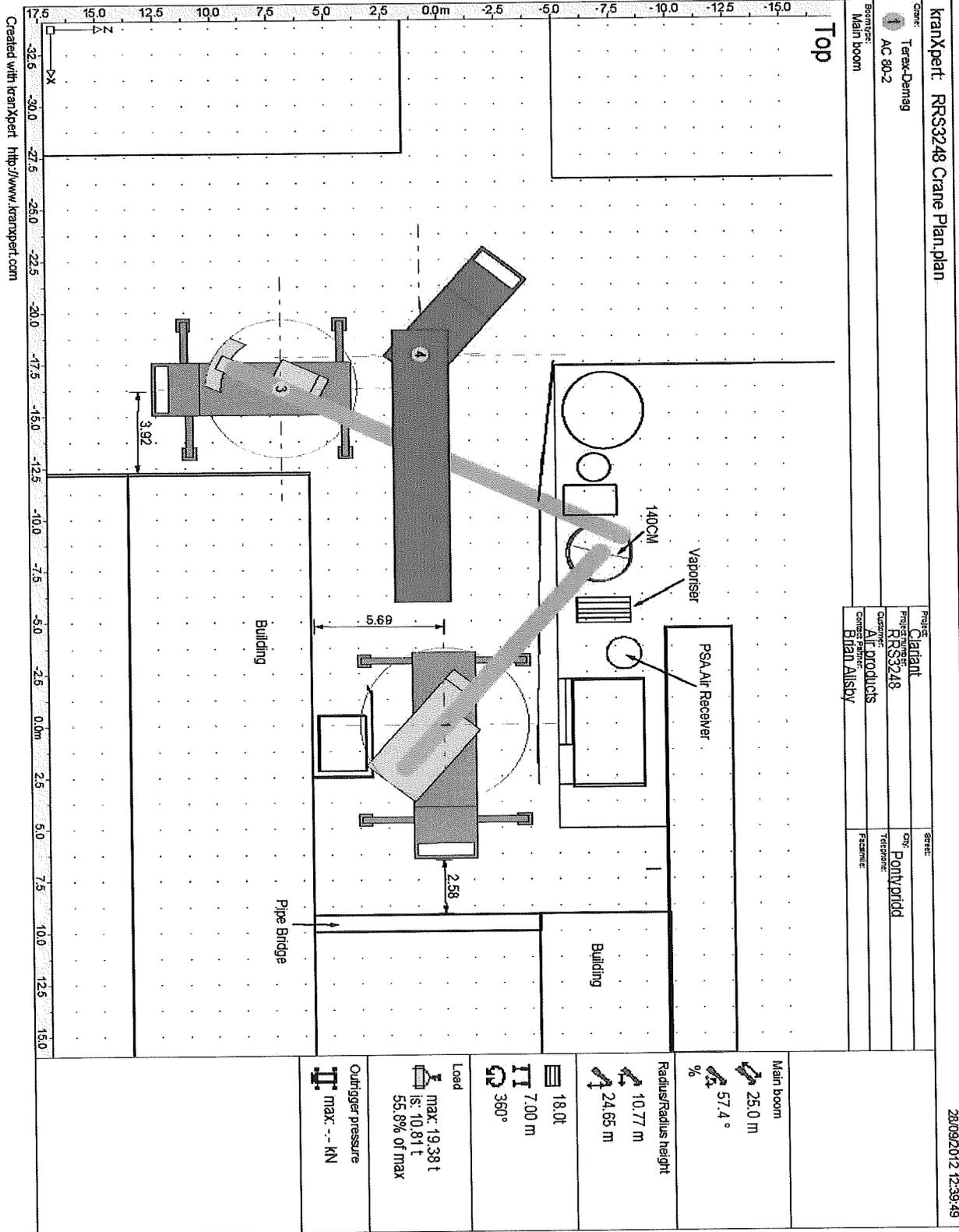
Traffic Management

Road closure	Yes	Footpath closure	No
Parking bay suspension	No	Disabled bay suspension	No
Equipment	Amount	Equipment	Amount
Men @ work signs	0	Men @ work end signs	0
Road narrows	0	Blue arrows	0
Road closed ahead	0	Road closed access only	0
Footpath closed	0	Footpath diversion	0
750mm Road cones	0	1000mm Road cones	0
Yellow cones	0	Pedestrian barrier	0
1m high metal barrier	0	Herres fencing	0
Other			

Picture of tank legs & ID Plate

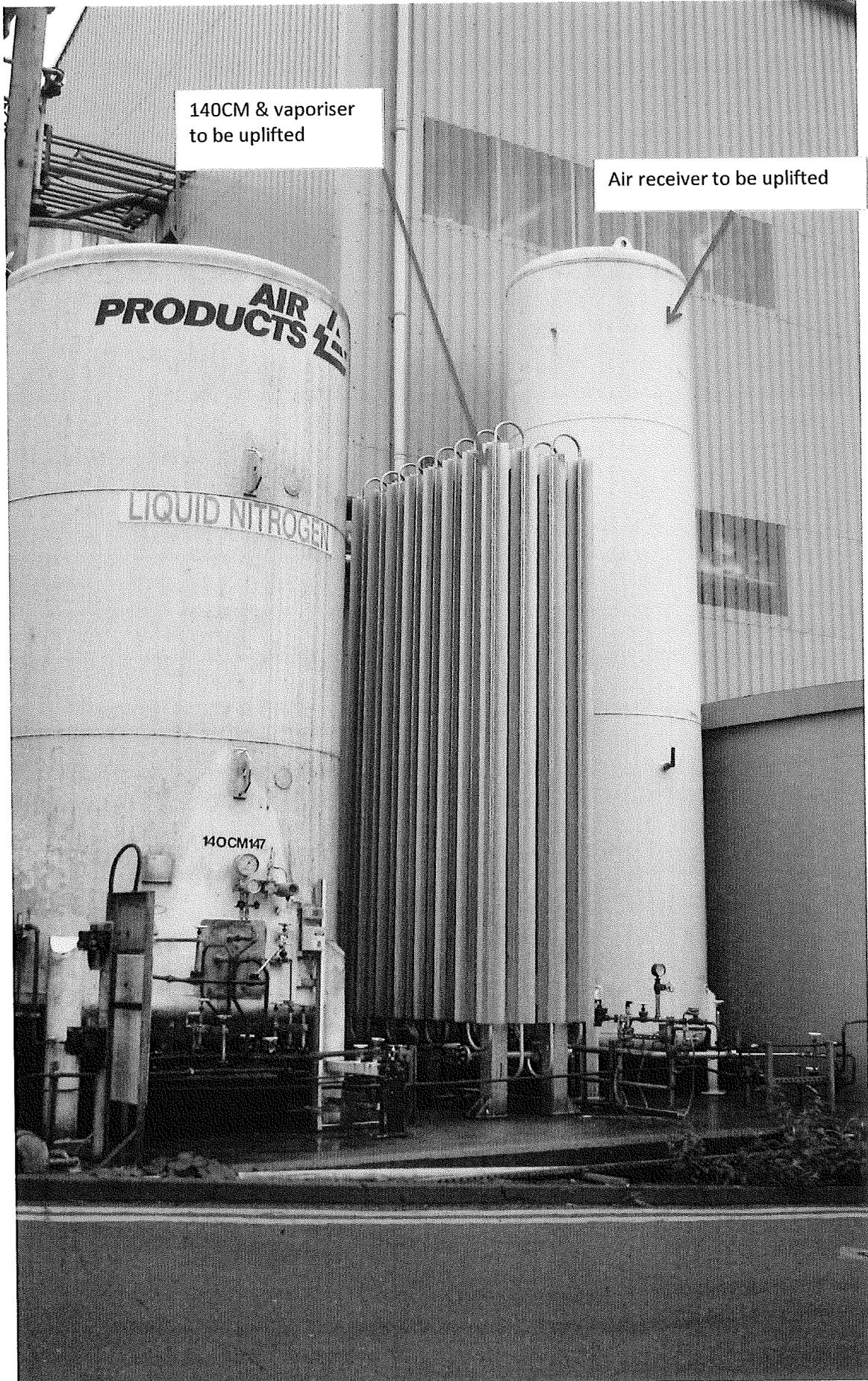


Berthing study / crane drawing



Site visit photos

Photo of lifting eyes, access and crane lifting area



Crane Drawing 3D

KranXpert: RRS3248 Crane Plan.plan

Crane:

Torex-Demag
AC 80-2
Main boom
Main boom

Project:

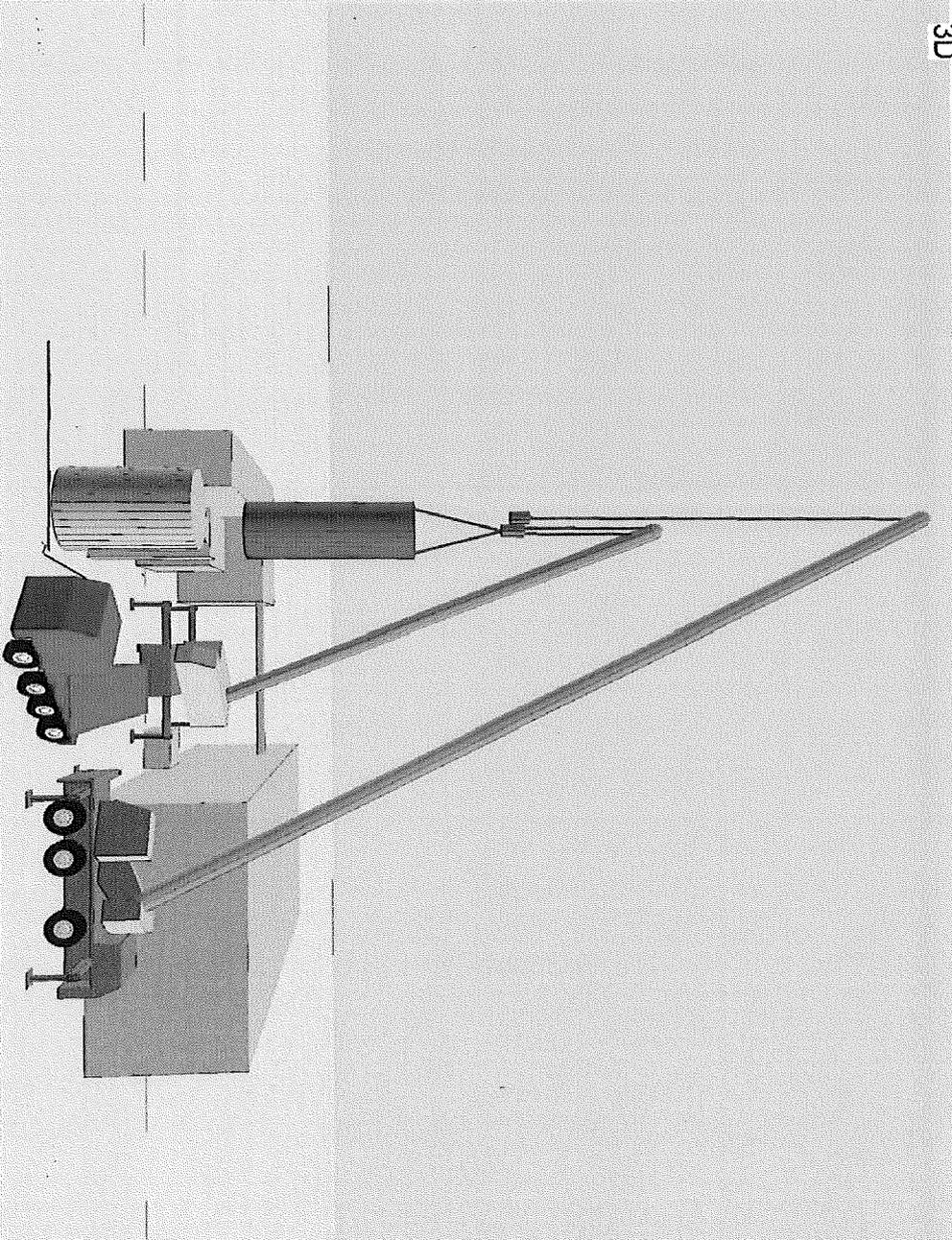
Client: Clariant
Project number: RRS3248
Classification: Air products
Contact: Brian Aisby

Site:

City: Pontypridd
Traction: Traction
Feature: Feature

28/09/2012 12:23:54

3D



Main boom

25.0 m

57.4 °

%

Radius/Radius height

10.77 m

24.65 m

18.0t

7.00 m

360°

Load

max: 19,38 t

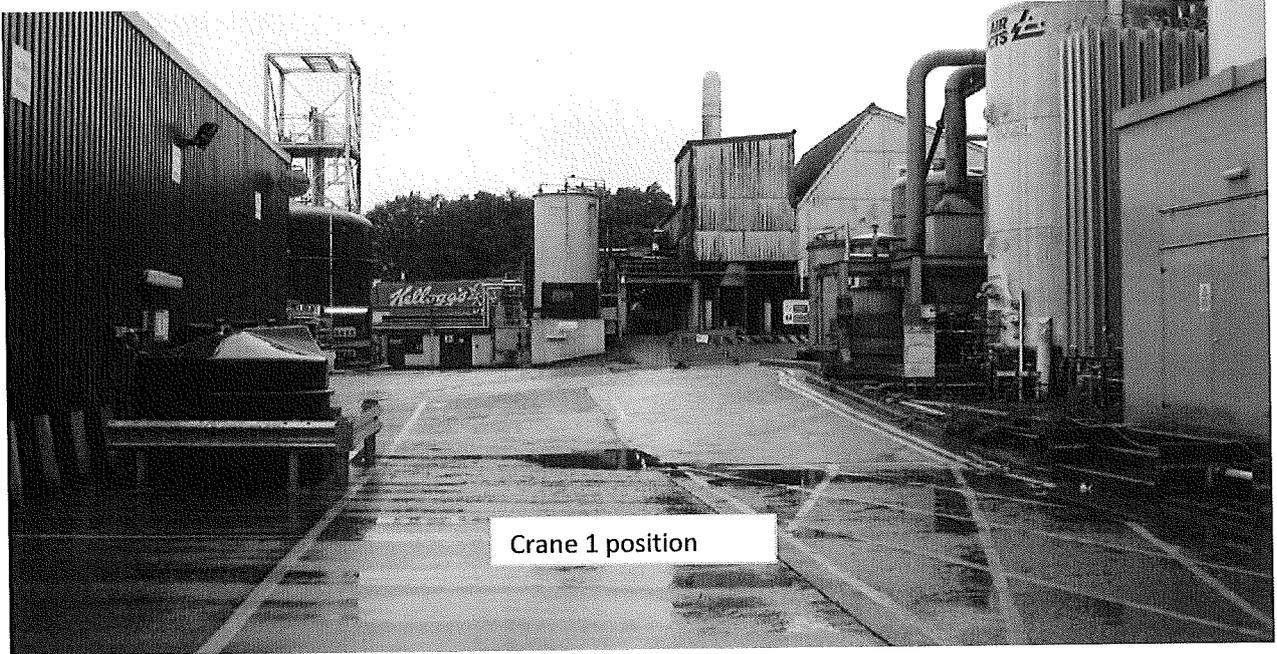
is: 10,81 t

55,8% of max

Outrigger pressure

max: -- kN

Site Visit Photos





Checklist For Use of Lifting Equipment

Before any lift of Air Products plant and equipment, this checklist must be completed by the Site Engineer or Project Supervisor and the Appointed Person.

Air Products Engineer / Technician	
Customer Site Address:	CLARIANT PRODUCTION UK LTD LLANTRISANT ROAD CF38 2SN
Date of Lift:	Project No. CS-12-2192

The following sections are to be completed by the Appointed Person and presented to the Air Products responsible person prior to lifting.

Note:

All dates are to be proof that the lift will proceed within the necessary period of approval.

<u>COMPANY NAME</u>			
<u>CRANE NO. 1</u>		<u>Inspection</u>	<u>Date</u>
Type		4 Yearly	
Size		12 Monthly	
Reg. No.		Daily	
Driver	Name:		
Certificate of Competence	Date:		
Safety Equipment (tick boxes)	Hard Hat <input type="checkbox"/> Boots <input type="checkbox"/> Gloves <input type="checkbox"/>		

Note:

Cranes used for lifting personnel require Six (6) Monthly Examinations.



Checklist For Use of Lifting Equipment

<u>COMPANY NAME</u>			
<u>CRANE NO. 2</u>		<u>Inspection</u>	<u>Date</u>
Type		4 Yearly	
Size		12 Monthly	
Reg. No.		Daily	
Driver	Name:		
Certificate of Competence	Date:		
Safety Equipment (tick boxes)	Hard Hat <input type="checkbox"/> Boots <input type="checkbox"/> Gloves <input type="checkbox"/>		

Appointed Person	Name:
Certificate of Competence	Date:
Safety Equipment (tick boxes)	Hard Hat <input type="checkbox"/> Boots <input type="checkbox"/> Gloves <input type="checkbox"/>
Rigger / Slinger	Name:
Certificate of Competence	Date:
Safety Equipment (tick boxes)	Hard Hat <input type="checkbox"/> Boots <input type="checkbox"/> Gloves <input type="checkbox"/>

<u>SLINGS</u>	Original Test Certificate	
	6 Monthly	
<u>WIRE ROPES</u>	Original Test Certificate	
	6 Monthly	
<u>SHACKLES</u>	Original Test Certificate	
	6 Monthly	
<u>LIFTING BEAMS</u>	Original Test Certificate	
	6 Monthly	
<u>MAN-BASKET/ BOSUN'S CHAIR</u>	Original Test Certificate	
	6 Monthly	
<u>SAFETY HARNES</u>	Certificate of Conformity	



Checklist For Use of Lifting Equipment

		COMMENTS:
<p><u>PREMEETING COMPLETED:</u> Method Statements:</p> <ul style="list-style-type: none"> Received, Read, Aligned And Agreed Risk Assessment discussed <p>Risk Assessments:</p> <ul style="list-style-type: none"> Received, Read, Aligned And Applicable <p>Process for installation agreed</p>	<p>Yes/No</p> <p>Yes/No</p> <p>Yes/No</p>	
<p><u>FINAL SITE CHECK:</u></p> <ul style="list-style-type: none"> Comments on ground conditions, hazards etc.) 	<p>Yes/No</p>	
<p><u>TOOL BOX TALK COMPLETED:</u></p> <ul style="list-style-type: none"> Outline process for the work Discuss tank type and bolt down process No working below loads or personnel Appointed person in charge during lift AP/contractors only enter lift area by invite of Appointed person All personnel involved in the work must participate in the toolbox talk. <p>Record names below:</p>	<p>Yes/No</p>	
Print Name	Signature	

We confirm that the lift can proceed as all of the necessary checks and communication has been successfully completed:

Signature of Appointed Person:	
Signature of Air Products Engineer:	

NOTE: On completion of the lift advise Steve Knowles of any feedback concerning any updates required of the detailed lift drawings.



Checklist For Use of Lifting Equipment

Before any lift of Air Products plant and equipment, this checklist must be completed by the Site Engineer or Project Supervisor and the Appointed Person.

Air Products Engineer / Technician	
Customer Site Address:	CLARIANT PRODUCTION UK LTD LLANTRISANT ROAD CF38 2SN
Date of Lift:	Project No. CS-12-2192

The following sections are to be completed by the Appointed Person and presented to the Air Products responsible person prior to lifting.

Note:

All dates are to be proof that the lift will proceed within the necessary period of approval.

<u>COMPANY NAME</u>			
<u>CRANE NO. 1</u>		<u>Inspection</u>	<u>Date</u>
Type		4 Yearly	
Size		12 Monthly	
Reg. No.		Daily	
Driver	Name:		
Certificate of Competence	Date:		
Safety Equipment (tick boxes)	Hard Hat <input type="checkbox"/> Boots <input type="checkbox"/> Gloves <input type="checkbox"/>		

Note:

Cranes used for lifting personnel require Six (6) Monthly Examinations.



Checklist For Use of Lifting Equipment

<u>COMPANY NAME</u>			
<u>CRANE NO. 2</u>		<u>Inspection</u>	<u>Date</u>
Type		4 Yearly	
Size		12 Monthly	
Reg. No.		Daily	
Driver	Name:		
Certificate of Competence	Date:		
Safety Equipment (tick boxes)	Hard Hat <input type="checkbox"/> Boots <input type="checkbox"/> Gloves <input type="checkbox"/>		

Appointed Person	Name:
Certificate of Competence	Date:
Safety Equipment (tick boxes)	Hard Hat <input type="checkbox"/> Boots <input type="checkbox"/> Gloves <input type="checkbox"/>
Rigger / Slinger	Name:
Certificate of Competence	Date:
Safety Equipment (tick boxes)	Hard Hat <input type="checkbox"/> Boots <input type="checkbox"/> Gloves <input type="checkbox"/>

<u>SLINGS</u>	Original Test Certificate	
	6 Monthly	
<u>WIRE ROPES</u>	Original Test Certificate	
	6 Monthly	
<u>SHACKLES</u>	Original Test Certificate	
	6 Monthly	
<u>LIFTING BEAMS</u>	Original Test Certificate	
	6 Monthly	
<u>MAN-BASKET/ BOSUN'S CHAIR</u>	Original Test Certificate	
	6 Monthly	
<u>SAFETY HARNESS</u>	Certificate of Conformity	



Checklist For Use of Lifting Equipment

		<u>COMMENTS:</u>
<u>PREMEETING COMPLETED:</u> Method Statements: <ul style="list-style-type: none"> • Received, Read, Aligned And Agreed Risk Assessment discussed Risk Assessments: <ul style="list-style-type: none"> • Received, Read, Aligned And Applicable Process for installation agreed	Yes/No Yes/No Yes/No	
<u>FINAL SITE CHECK:</u> <ul style="list-style-type: none"> • Comments on ground conditions, hazards etc.) 	Yes/No	
<u>TOOL BOX TALK COMPLETED:</u> <ul style="list-style-type: none"> • Outline process for the work • Discuss tank type and bolt down process • No working below loads or personnel • Appointed person in charge during lift • AP/contractors only enter lift area by invite of Appointed person • All personnel involved in the work must participate in the toolbox talk. Record names below:	Yes/No	
Print Name	Signature	

We confirm that the lift can proceed as all of the necessary checks and communication has been successfully completed:

Signature of Appointed Person:	
Signature of Air Products Engineer:	

NOTE: On completion of the lift advise Steve Knowles of any feedback concerning any updates required of the detailed lift drawings.



Site Specific Lifting Plan



Section 1 - Contract Information

Customer:	Air Products	RRS Contract:		Revision:	
Customer Contact:	Brian Ailsby	Contact Number:			
Appointed Person:	Mr. John Duffield	Contact Number:		07917759415	
Start Date:		Start Time:			
Site Address:	Clariant Llantrisant Road Pontypridd CF38 2SN		RRS Survey Number:	RRS3249	
Health & Safety Contact Details					
Office Manager:	Mr. John Harfield		07702710940		
H & S Director:	Mr. Paul Barber		07775736951		
H & S External Advisor:	Miss Zoe Drew		023 8089 4695		

Section 2 - Scope of Works

Terms & Conditions:

CPA Contract Lift: Yes

If work is being undertaken subject to the Standard CPA Hire Terms and Conditions, please ensure you have suitable insurance cover.
If you are uncertain as to your responsibilities under either hire type, contact the RRS office prior to acceptance of equipment onsite.

Scope of Works:	
Contract lift to uplift one 140CM tank ,a vaporiser & one air receiver tank & load onto RRS transport	
Special Preparations to be carried out by RRS:	Special Preparations to be carried out by the customer

Section 3 - Lift Classification

This lift has be classified as: Complex

Section 4 - Associated Documents

This Method statement is to be read in conjunction with the following documents:

- Site specific survey report
- Crane plan drawing
- Generic risk assessments



Section 5 - Certification Check List

Lifting Equipment			
Vehicle Registration:		Make/model:	
Thorough examination expiry date:		Last wkly Insp:	
Vehicle Registration:		Make/model:	
Thorough examination expiry date:		Last wkly Insp:	
Lifting Tackle			
Description:	SWL:	Serial Number:	Next Inspection:

Section 6 - Arrival onsite

- 1 The working area and access route must be cleared & suitable to allow safe passage & set up
- 2 All personnel involved with the lift to report directly to the site contact and sign onto site
- 3 Site specific induction to be conducted to include, emergency procedures, etc
- 4 Cranes to be escorted to the lift area and an exclusion zone to be set up around them
- 5 Equipment & operators certification to be checked and recorded on the method statement
- 6 Lift supervisor to carry out a team brief before work starts
- 7 Site contact to confirm all equipment to be lifted is isolated and ready to lift

Section 7 - Risk Assessment

Prior to starting work a Risk Assessment must be completed to confirm that site conditions have not changed from the original site survey. If there are any new hazards, work must stop until the Appointed Person has been consulted

Proximity Hazards

	Yes	No		Yes	No
Overhead cables			Confined working area		
Other overhead hazards			Restricted access-width		
Underground hazards			Restricted access-height		
Unstable/soft ground			Site has changed		
Access/egress			Other hazards		

Section 8 - Lift plan

- 1 Cranes to set up as per manufacturers instructions, boom length, outrigger settings etc as specified on the survey report

- 2 Once rigged the working radius of both cranes to be checked against the survey report
- 3 Transport to be directed into position and stopped within the safe working radius of the main crane, (MC)
- 4 All directions to the crane operator will be from the banksman by means of hand signals
- 5 Bosuns chair to be attached to the MC hook block
- 6 Banksman to attach his lanyard to the MC hook block and strap himself into the chair
- 7 MC to raise the chair to the top of the tank, so the banksman can reach the lift points
- 8 Banksman to attach the lifting tackle to the top of the tank
- 9 Chair to be lowered to the ground and removed from the MC hook
- 10 Lifting tackle to be attached to the MC hook block
- 11 Tank to be lifted and jibbed towards the MC
- 12 Tank to be lowered to the ground
- 13 Lifting tackle to be attached to the tailing cranes (TC) hook block
- 14 TC to be attached to the lifting lugs at the base of the tank
- 15 Under instruction from the banksman the MC to raise the tank clear of the ground, MC to be kept in free slew mode
- 16 TC to start to lift the base of the tank, as the base starts to lift the TC to slew the base of the tank away from the MC
- 17 MC to lower the top of the tank as the TC slews the base away
- 18 Both cranes to take direction from the banksman at all times. The aim is to keep the tank as close to the ground whilst the tank is laid horizontal
- 19 Once horizontal the tank to be lowered to the ground
- 20 Timber chocks to be placed along side the tank
- 21 Lift tackle to be removed from the base and the TC to be slewed away from the lift area
- 22 MC to be positioned centrally over the tank and lifting tackle attached to both ends of the tank
- 23 Tank to be lifted horizontally and slewed towards the transport
- 24 Tank to be landed onto the transport, slings must not be released until the tank has been chocked and secured
- 25 Vaporiser to be lifted and positioned in a similar manner

- 26 Both cranes to de-rig as per the manufacturers specifications and prepare for leaving site
- 27 Cranes and transport to be escorted from site
- 28 Lift area to be checked for hazards and reopened for general use
- 29 Customer satisfaction note to be checked and signed by the site contact
- 30 Any feedback to be added to the lift plan
This method is to be used to uplift & load the air receiver tank

If using crane assisted transport please ignore line 3, of this lifting plan

Section 9 - Approval of Method Statement

Appointed Person's Acceptance of Responsibilities;			
I confirm that the lifts have been planned and will be carried out in accordance with current legislation and BS7121 and that I accept responsibility for the preparation on this Risk Assessment, Method Statement & Crane Drawings.	Signed: JDuffield		Date: 28-09-2012
			CPCS No: 142741/1

Lift Supervisor's Acceptance of Duties;			
I confirm that I have been fully briefed on the contents of this Risk Assessment & Method Statement & that I accept the duty of ensuring that the lift(s) will be carried out in accordance with the method & procedures set out in this	Signed:		Date:
			CPCS No:

Team Declaration:

By Signing this form, confirms you have read & understood this method statement. If you are unsure at any point please advise the Lift Supervisor

Company	Position	Name	CPCS No	Signature	Date
RRS	Banksman				
RRS	Lorry Driver				
	Crane Driver 1				
Air Products	Engineer				
	Crane Driver 2				

Section 10 - Changes

Changes can only be made to this method statement by the Lift Supervisor once they have been agreed by the Appointed Person.

All changes must be noted below. Dates, times and reasons for the changes must be listed.

Section 11 - Completion

On completion of works this method statement must be signed off by the Lift Supervisor and the Air Products Engineer, along with the standard RRS Customer satisfaction note to confirm all works have been completed in a satisfactory manner. Any /All delays, problems must be noted below, including winding off. Your comments are important. Both good and bad comments are requested. Feedback from method statements is used for continual improvements

Lift Supervisor:

Site Manager:

5

6

7



SERVICE PLUS REPORT

COMPREHENSIVE TECHNICAL SUPPORT SERVICES
UK CUSTOMER ENGINEERING - Air Products PLC, Manchester Road, Carrington, Urmston, Manchester M31 4TG
Tel: 0845 607 1207

Customer A/C Code _____ Customer Order No. _____

Type Of Equipment
Membrane Tank / Prism Unit

SAP Work Order Number
600030530
Type of Call
SE-INSTALL

Date
23/10/12
Date Received
22/10/12

Customer Name & Address
*CHARMINT
Honey Pops
S. Wales*

CONTRACT REVIEW
Description of work to be done:
*REMOVE 1600 LITRE TANK
AV 3000 VAPORISER
LITRE BUFFER VESSEL
AIR COMPRESSOR
" PRISM MEMBRANE UNIT
HOUSE LINE RAIL*

Approval to proceed
Name
JANE MILLS
Signature
J Mills

Spares / Details of further visits required

Description of Materials/Work Done		No.	Rate	Price
<input type="checkbox"/>	Flow monitoring.....			
<input type="checkbox"/>	De-icing.....			
<input type="checkbox"/>	Tank pipework repair.....			
<input type="checkbox"/>	Installation pipework repair.....			
<input type="checkbox"/>	Training.....			
<input type="checkbox"/>	Fault investigation.....			
<input type="checkbox"/>	Customer owned plant inspection.....			
<input type="checkbox"/>	Routine maintenance visit.....			
<input type="checkbox"/>	Replace.....			
<input type="checkbox"/>	Supply.....			
<input type="checkbox"/>	Repair.....			
<input type="checkbox"/>	Equipment calibration.....			
<input type="checkbox"/>	Pressure testing.....			
<input type="checkbox"/>	Other <i>REMOVED ALL HIGH OWNED EQUIPMENT AS LISTED.</i>			
Technician / Engineer <i>J. Blomfield</i>		Expenses		
Engineering Manager		Mileage		
Customer Approval Name <i>JANE MILLS</i>		Labour		
Signature <i>J Mills</i>		TOTAL		

Expressed Interest:

<input type="checkbox"/>	Inspection & Safety Audits.....	<input type="checkbox"/>	Training & Consultancy.....
<input type="checkbox"/>	Installation & Maintenance.....	<input type="checkbox"/>	Process Optimisation.....
<input type="checkbox"/>	Design & Project Management.....	<input type="checkbox"/>	Testing & Analysis.....
<input type="checkbox"/>	Pressure Systems Inspection.....	<input type="checkbox"/>	Maintenance Contract.....

8

9

10