

Gas Safety Management Plan (Section A)

Derriford ARC

11/04/2025

Produced to meet the requirements of the Gas Safety (Installation and Use) Regulations 1998

(Gas Safety Management Plan (Section B) covers the requirements of the Gas Safety (Management) Regulations 1996

Unique Document Reference: WX29-A-20220218
Issued by DIO TS PGE

Establishment: Derriford ARC

ESTABLISHMENT KEY PERSONALITIES (GAS) CONTACTS

ESTABLISHMENT	I KET PERSONALITIES	23 (GAS) CONTACTS		
Role	Name	Tel No.	Email	
Head of Establishment	Lt Col John Porter	07984867792	John.Porter173@mod.gov.uk	
Establishment's SHEF	WO2 Shaun Ripley	07734436315	Shaun.ripley591@mod.gov.uk	
Establishments 4C's Coordinator	WO2 Shaun Ripley	07734436315	Shaun.ripley591@mod.gov.uk	
Senior DIO Estate Representative or Equivalent	Mark Cubitt	07955 280440	wx-est-hd@rfca.mod.uk	
Site DIO Estate Representative or Equivalent	Kelvin Walker	07508 130359	wx-est-mgr2@rfca.mod.uk	
MMO Site Manager or equivalent	WO2 Shaun Ripley	07734436315	Shaun.ripley591@mod.gov.uk	
Gas Safety Manager (GSM)	Justin Westcott	07793222820	Justin.westcott@vivodefence.com	
Gas Responsible Person (GRP)	Wayne Ashford	07483 929760	wayne.ashford1@vivodefence.com	

The Content of this Gas Safety Management Plan (GSMP) have been Approved by the Gas Safety Manager:

Signature: JP Westcott	Date: 11/04/2025
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Authorisation for Implementation

The content and format of this GSMP has been agreed and authorised for implementation by Defence Infrastructure Organisation Technical Services Principal Gas Engineer (DIO TS PGE) and a unique reference number has been generated to support this.

Approved – J Obbard PGE – 18th Feb 2022

The Content of this GSMP have been agreed by the Senior DIO Estate Representative or Equivalent and future works following the findings will be supported:

Signature:	M Cubitt	Date:	07/05/2025

The content of this GSMP have been agreed by the Head of Establishment and future works following the findings will be supported

Signature:	J G Porter	Date : 01/09/2025

REVIEWS AND AMMENDMENTS

GSMPs are 'living documents' that should be subject to continual review and updating as required. Although the level of attention required will vary considerably depending on the size and complexity of each site, GSMPs should be reviewed at least once per quarter by the GRP, unless otherwise agreed by the PGE. Although it is likely that changes are not required at each review, the date of review and any changes made should be indicated on the tables below. The review of the GSMP will include a site visit to ensure that the site and the content of the GSMP remain valid. The reviews and amendments made will be deleted during the DIO TS three yearly review when the GSMP is re-authorised by the PGE.

Date	Page No.	Amendment
22/10/2021	All	Initial Development
06/05/2022	2	Updated Gas Emergency Helpdesk Number
06/05/2022	3	Updated RFCA Gas Emergency Contact Number
06/05/2022	3	Added New Gas Supplier Details
06/05/2022	3	Changed MAM Details
06/05/2022	3	Changed Gas Emergency Number
06/05/2022	7	Changed Meter detail in section 3.1
06/05/2022	7	Changed MoD Network detail in section 3.2
06/05/2022	9	Changed Gas Emergency Number
02/08/2022	8 & Annexes	Inserted Gas Line Drawings, References and Icons
10/11/2022	8 & Annexes	Inserted Gas Network Layout Drawing & Icon
17/02/2023	ii & 2	Added New HoE Details
17/02/2023	7	Added Measured Gas Pressures
	N/A	No Amendments Required
	N/A	No Amendments Required
27/11/2023	N/A	Removed Plate Warmer from Appliance List as Now Capped
06/12/2023	ii	Updated SHEF Details
29/02/2024	N/A	No Amendments Required
15/05/2024	N/A	No Amendments Required
09/08/2024	N/A	No Amendments Required
04/10/2024	ii, 2	Updated HoEstates Details, Added SSOV Details
18/10/2024		GSM re-authorisation (previously authorised 17/02/2023)
14/11/2024	ii & 1	Updated HoEstablishment, SHEF, 4c's Contact Numbers
07/04/2025		Amended all key personalities and changed DNV details to VIVO details
03/09/2025	ii & 1	Change of HoE

Date	Reviewed by	Authorised by	Comments	
28/01/2022	M Fenwick	N King	Initial Review	
06/05/2022	M Fenwick	M Fenwick	Quarterly Review	
02/08/2022	M Fenwick	M Fenwick	Quarterly Review	
10/11/2022	M Fenwick	M Fenwick	Quarterly Review	
17/02/2023	M Fenwick	N King	Annual Review	
10/05/2023	M Fenwick	M Fenwick	Quarterly Review	
17/08/2023	M Fenwick	M Fenwick	Quarterly Review	
27/11/2023	M Fenwick	M Fenwick	Quarterly Review	
29/02/2023	M Fenwick	N King	Annual Review	
15/05/2024	M Fenwick	M Fenwick	Quarterly Review	
09/08/2024	M Fenwick	M Fenwick	Quarterly Review	
18/10/2024	Neville King	Neville King	GSM re-authorisation	
14/11/2024	M Fenwick	M Fenwick	Quarterly Review	
24/01/2025	M Fenwick	M Fenwick	DNV De-Mobilisation Review /	
			Handover	
07/04/2025	W Ashford	W Ashford	Annual review	
11/04/2025	J Westcott	J Westcott	Initial review/approval	
23/04/2025	W Ashford	W Ashford	Quarterly Review	
26/08/2025	W Ashford	W Ashford	Quarterly Review	

FORWARD

MOD, as a gas conveyor within Great Britain, has submitted an Exemplar Gas Safety Case (MOD GSC) to demonstrate compliance with the Gas Safety (Management) Regulations 1996 (GS(M)R). Maintenance Management Organisations (MMO's) are engaged who have the overall contractual responsibility to operate and maintain the gas network assets under their Contract, including the management of the safe flow of gas within the system and the provision of an emergency service. The MOD delegate specific duties to the MMO but accountability for gas safety on each site rests with the Head of Establishment.

Whilst gas downstream of the Emergency Control Valve (ECV) fall outside of the scope of (GS(M)R) similar criteria as those referred to above must be accommodated within an appropriate management system. The specific criteria required to adequately manage gas infrastructure downstream of the ECV are described in the Gas Safety (Installation and Use) Regulations 1998 (GS(IU)R).

The MOD GSC considers all parts of the MOD estates gas supply system that forms part of the gas supply network. This includes all parts of the MOD gas network from the Bulk Primary Meter Installation to the individual gas appliances and the safe release of the products of combustion. The MOD GSC considers primarily those matters that relate to the management of the safe flow of gas within the system and the provision of an emergency service for all aspects of the gas system.

Following initial approval of the Gas Safety Management Plans (GSMPs) by the DIO Principal Gas Engineer (PGE), the Gas Safety Manager (GSM) is required to reapprove this GSMP annually. GSMPs must be submitted to DIO PGE every three years for authorisation.

GSMP Section A document contains site specific details of the establishments utilisation infrastructure to assist with measures to ensure compliance with the GS(IU)R for installation pipework and associated components.

GSMP Section B documents contain site specific details and arrangements as a direct annex to the MOD GSC in line with the Gas Safety (Management) Regulations 1996 (GS(M)R).

GSMP Section C document contains site specific details and requirements of the establishment's LPG networks.

Although the legal status of this document applies in the UK only, the MOD apply the same requirements to the management of gas on its overseas estate, in accordance with the currently published Secretary of State's Health and Safety policy statement.

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1 THE DUTY HOLDER AND ESTABLISHMENT LEVEL KEY PERSONALITIES

1.1. Gas Safety Case Duty Holder.

The duty holder for the MOD Gas Safety Case is the Permanent Under Secretary for Defence (PUS). However, day to day responsibility for the preparation and maintenance of the document is delegated to the DIO TS Head of Engineering and Construction, who also has the responsibility for managing the system in accordance with the Safety Case. PUS delegates maintenance responsibility to the Top-Level Budget Holders (TLB's), to manage safety of the gas network. The TLB's utilise MOD Contracts i.e. MMOs who have responsibility for maintaining the gas network on behalf of the MOD.

Name: Permanent Under Secretary

Address: Main Building

Horse Guards Parade

Whitehall London SW1A 2HB

1.2. DIO Technical Services Principal Gas Engineer (PGE).

The PGE assumes the role of Senior Authorising Authority which is a term used within the MOD to recognise the authority of the person responsible for overseeing the appointment of, and auditing Authorising Engineers (AEs). For Gas the AEs are replaced by Gas Safety Managers (GSMs).

Name: Jeremy Obbard

Address: DIO HQ

Whittington Barracks

Lichfield WS14 9TJ 1: 07748 903260

☑: Jeremy.obbard100@mod.gov.uk

1.3. Establishment Personalities.			
Name of Establishment:	Derriford ARC		
Establishment Address:	Derriford ARC 258 Brest Road Plymouth Devon PL6 5EW		
Head of Establishment (HoE) (This is the most senior MOD person identified, by the chain of command, as responsible for the establishment. The HoE holds accountability for ensuring site compliance with the requirements of GSMR and the MOD GSC, including this GSMP.)	Name: Position: Organisation: Address:	Lt Col John Porter Commanding Officer MoD Derriford ARC Brest Road Plymouth Devon PL6 5EW 07984867792 john.porter173@mod.gov.uk	

Senior DIO representative	Name:	Mark Cubitt
or equivalent	Position:	Head of Estates
	Organisation:	Wessex Reserve Forces' & Cadets'
(This may be the SEFM,		Association
but will vary depending on	Address:	Mount House
the contract this		Mount Street
establishment falls under)		Taunton
,		Somerset
		TA1 3QE
	2 :	07955 280440
	⊠:	wx-est-hd@rfca.mod.uk

1.4. Maintenance Management Organisation (MMO).				
The MMO for this es	tablishment is:	VIVO		
Gas Emergency Helpdesk (Typically, MMO Helpdesk) (24 Hours) Note: Please do not contact the general public	Organisation:	VIVO Helpdesk		
National Gas Emergency Service for suspected gas escapes on RFCA infrastructure.	2 :	0800 030 9320		
Gas Safety Manager (GSM)	Name: Organisation: Address:	000 ===0=0		
Gas Responsible Person (GRP)	Name: Organisation: Address:			
	<u></u> ⊠:	Wayne.ashford1@vivodefence.com		

1.5. Additional Gas Conta	1.5. Additional Gas Contacts.			
Gas Supplier	Organisation: Address:	Totalenergies Gas & Power 55-57 High Street Redhill Surrey RH1 1RX 01737 275 746 gp.redhill.ccs@totalenergies.com		
LPG Supplier	Organisation: Address:	Not Applicable, no bulk LPG on site.		
Meter Asset Manager (MAM)	Organisation: Address:	6 Almondvale Business Park Almondvale Way Livingston EH54 6GA		
National Gas Emergency Centre (24 Hours)	2 :	0800 111 999		

2 SITE SPECIFIC DETAILS

2.1 Site Overview.

A brief description of the establishment and its current use. This should include how many separate sites are present and the number of buildings being supplied by gas.

Derriford ARC is a single site establishment with 2 buildings on site. Both buildings are supplied with gas from the Low Pressure (LP) MoD Network.

There are no individual EDGN supplies on site.

The reserve centre is occupied by 264 Headquarters Squadron and the 265 Port Squadron of the 165 Port and Maritime Regiment RLC, C Detachment 243 Field Hospital and Unit 383 Commando Petroleum Troop (V).

Building 1 is used for office space, the caretakers flat, meeting/conference rooms, stores, catering, drills and a lounge/bar.

Building 2 is occupied by the MT section.

Day to Day there are around 20 people on site and there can be up to 200 people on site when there are functions, events or parades.

2.2 Natural Gas.

A brief description of the natural gas installations, including how many MOD networks are present, the number of buildings each MOD network supplies and how many buildings are supplied direct from the EGDN. This should also include any demarcations in place between stakeholders and responsibilities.

There is 1 bulk fiscal meter on site supplied at Low pressure by the EGDN network. This meter then supplies an MoD network at 20.8 mbar with 2 buildings (1 and 2) fed from the MoD network.

The bulk fiscal meter is in a brick-built standalone meter house at the Northeast boundary of the site within the wire.

Bulk Fiscal Meter – Roots Meter Series 4, Model HRD0160B4C S/N – M0160D768413B7 160 m/3hr MPRN - 3801903

The EGDN network enters the Bulk Fiscal Meter house in 100mm PE and reduces to 4" Steel after the ECV. This further reduces to 2" steel after the gas meter and then increases to 8" steel on the meter house outlet. The Bulk Fiscal meter outlet valve is the demarcation point between the MoD network and the EGDN supply. The MoD is responsible from the Bulk Fiscal meter outlet valve up to and including the appliances in the buildings. The MoD network feeds 2 buildings.

The MoD network is thought to consist of mainly buried steel pipework and is approx... 100 metres in length.

The MoD network is thought to have been installed in the early 1990's.

The Gas Safety Management Plan Part B will cover the Network in more detail.

Building 1

Building 1 is fed by a single low pressure natural gas supply from the MoD network. The gas pipework enters the building below ground and rises from the floor within the plant room in screwed 4" steel to an ECV. The Demarcation point between the MoD network and installation pipework is the ECV at the plant room point of entry.

The gas runs through the ECV and a solenoid valve and tees off -1 feed for the plant room and the other for the Galley and caretakers flat.

The feed toward the boilers in the plant room is 2" stainless steel Mapress. This section runs through a filter and reduces to $1\frac{1}{2}$ " stainless steel Mapress before entering the boiler rig. This supply feeds 3 x Remeha Quinta ACE 115 boilers with a total load of 329.1 KW. The other tee section runs out of the plant room and towards the Galley through the ceiling void.

There is a tee section on route with a 22mm copper supply to the Caretakers flat feeding a Worcester Greenstar 25i ERP with a total load of 25 KW.

The pipework entry to the Galley is at high level and drops down into the hot water boiler cupboard in 1½" steel and then exits the cupboard through the wall and runs through the interlocking solenoid valve and feeds 4 appliances reducing down to 22mm copper.

Water Heater Cupboard – Andrews 63AU0620 with a total load of 19.5 KW. Galley - Falcon Deep Fat Fryer 25 KW, Blue Seal 6 Burner Range with Oven 45 KW, Blue Seal Solid Top with Oven 40 KW, Victor Oven Warmer 8 KW.

The total load on this installation is 466.6 KW.

There is a mix of steel, stainless steel and copper pipe within the installation.

Building 2

Building 2 is fed by a single low pressure natural gas supply from the MoD network. The gas pipework enters the building below ground and rises from the floor within the plant room in screwed 2" steel into an ECV at the point of entry. The Demarcation point between the MoD network and installation pipework is the ECV at the plant room point of entry.

The gas runs through the ECV and a solenoid valve and reduces to 1½" steel to the single boiler. This is the only gas pipework within this building.

Potterton Eurocondense – thought to have a load of 215 KW, to be confirmed. The total load on this installation is assumed 215 KW.

There is only steel pipe within the installation.

2.3 LPG Gas.

A brief description of the LPG installations, including how many compounds are at the establishment, condition and make up of each compound, the number and size (kg) of vessels in each compound, the number of LPG MOD networks, the number of buildings supplied from the LPG MOD networks, how many buildings are supplied direct and not from an LPG MOD network. Details of the LPG pipework after the first stage regulator up to the building(s).

Note: The demarcation agreement between the LPG supplier and the MOD has been agreed and the MOD take responsibility from the outlet of the first stage regulator. The LPG supplier is responsible for the vessel, vessel associated components (excluding any earth bonding) pipework up to and including the first stage regulator.

No LPG on this establishment

2.4 External Installation Pipework.

A brief description of the external installation pipework (above or below ground) on each building. This is from the ECV to where it enters the building(s), the material, diameter, lengths, supports, conditions etc.

There is no external installation pipework.

2.5 Details of buildings served.

A list of the buildings being supplied by gas via an MOD network, LPG compound or directly from the EGDN and the usage of the gas (catering, hot water, heating, fire training, etc) at the building.

Ser	Building Number	Building description	Supplied by	Gas usage
1	Building 1	Office space, meeting/conference rooms, stores, catering, drill hall, , caretakers flat and a lounge/bar.	MoD Network	Heating, Hot water, Catering
2	Building 2	MT section	MoD Network	Heating

2.6 Additional details of buildings being served.

Any additional detail about a building that may be required or useful in an emergency or requires more details than captured above.

NOTE: This section is to be used to capture the Service Family Accommodation (SFA) properties where it is not practical to fit above.

N/A

3 METER DETAILS

3.1 Primary Meter Details.

The following table describes the basic arrangement of the primary meter installation(s). (These are the responsibility of the MAM)

NOTE: More detail on the primary meters that supply MOD networks can be seen in the GSMP part B.

Number of primary meter installations:		1							
M (N (ID		Supplying		Incoming pressure tier – HP, IP, MP, LP	Outlet pipeline				
Meter Name / ID	MPRN	(MOD network ID or Bldg number)	location		P tier – HP, IP, MP, LP	Pressure (mbar)	Material	Diameter (mm)	- Max Flow (M³ hr)
Bulk Fiscal Primary Meter	3801903	Main Building	External Meter House	LP	LP	20.8	Steel	200	160

3.2 Utilisation Meter Details. (meters supplied directly from the MOD gas network)

The following table describes the basic arrangement of the utilisation meter installation(s). (These are the responsibility of the MOD)

Number of utilisation meter installations: 0 – All buildings are Shown

				Inlet pipeline				Outlet pipework		
Meter Name / ID	Being supplied from	P tier – HP,	Pressure	Material	Diameter	P tier – HP,	Pressure	Material	Diameter	Max Flow
	(MOD network ID)	IP, MP, LP	(mbar)		(mm)	IP, MP, LP	(mbar)		(mm)	(M³ hr)
Unmetered Buildings sho	Unmetered Buildings shown below									
Building 1 - Not	MoD Network 001	LP	NTP	Steel	80	LP	20.5	Steel	80	N/A
Metered										
Building 2 - Not	MoD Network 001	LP	NTP	Steel	50	LP	20.4	Steel	50	N/A
Metered										

4 DIAGRAMS AND DRAWINGS

4.1 Line diagrams for building(s) internal gas installation pipework.

This section is to contain line diagrams for building internal installation pipework and associated components. This diagram should be fixed to the building at a practical and accessible location as well as within any associated document centres. It may be embedded as a PDF to this document for online use.

NOTE: Drawings are only required for commercial installations or for installation in commercial settings (non-domestic use). This may mean more installations than listed in IGEM/UP/2 Edition 3 (4.2.14), depending on the installations intended use.

(1.2.11), depending on the installations interface doe.							
Drawing Number Building		Comments					
WX29-A-A3	Building 1	Not to Scale Gas Line Drawing.					
WX29-A-A3	Building 2	Not to Scale Gas Line Drawing.					
		WX29-A-A3.pdf					

4.2 Additional drawings.

This section is to contain any additional drawings that may be required or may be of benefit to this GSMP or emergency procedures.

Drawing Number		Commente			
Drawing Number	Building	Comments			
WX29-B-A1	Gas Network	Site Gas Layout Drawing			
		WX29-B-A1.pdf			

5 GAS INCIDENTS

5.1 Site reporting procedures for dealing with gas incidents.

This section is to contain the establishment's site-specific procedure for dealing with reports of gas incidents with regards the external installation pipework, internal installation pipework and equipment. Details of all individuals with responsibilities under this procedure should be included.

Procedure for an incident involving the gas installations on site:

- Call VIVO Helpdesk Team on **0800 030 9320** open 24 hours per day.
- The Helpdesk will in turn call National Grid <u>0800 111 999</u> to attend and make safe a gas incident.
- The Vivo Gas Responsible Person shall be informed immediately by the site personnel.

6 GAS EQUIPMENT

6.1 Equipme		the gas equipment bei	ng used at the establis	shment		
Building number	Equipment location	Equipment type (make, model)	Serial Number	Appliance kW rating	Flue classification	Comments
Building 1	Plant Room	Remeha Quinta ACE 115	2014623821510	109.7	Open Flue	
Building 1	Plant Room	Remeha Quinta ACE 115	2014623816740	109.7	Open Flue	
Building 1	Plant Room	Remeha Quinta ACE 115	2014623816640	109.7	Open Flue	
Building 1	Galley	Falcon Deep Fat Fryer	No data Plate	25	Flueless – Canopy Extract	
Building 1	Galley	Blue Seal 6 Burner Range with Oven	No Data Plate	45	Flueless – Canopy Extract	
Building 1	Galley	Blue Seal Solid Top with Oven	No Data Plate	40	Flueless – Canopy Extract	
Building 1	Galley	Andrews 63AU0620	PD39333975	19.5	Open Flue	
Building 1	Caretakers Flat	Worcester Greenstar 25i ERP	5570-556- 0011423- 7733600012	25	Room Sealed	
Building 2	MT Workshop Plant Room	Potterton Eurocondense	Data Plate not accessible	Data Plate not accessible	Open Flue	

6.2 Additional equipment information.

This section is to contain any additional equipment information that may be required or may be of benefit to this GSMP or emergency procedures.

Safety shut off valves are required to be frequently checked every year in accordance with CRFCA hard FM task list: 160418-GL-EST-Task2Ser9-GasApplianceandPipework A list of the checks is captured below.



DERRIFORD ARC 56638 PMV.pdf

Kitchen Canopy Gas Interlock installed in Main Building Kitchen, with SSOV and emergency stop button by exit door.

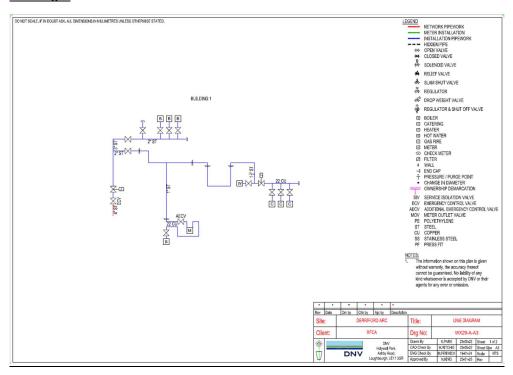


In-line solenoid observed in Building 1 plantroom, believed to be fire alarm linked, unable to validate and test. In-line solenoid observed in Building 2 plantroom, believed to be fire alarm linked, unable to validate and test.

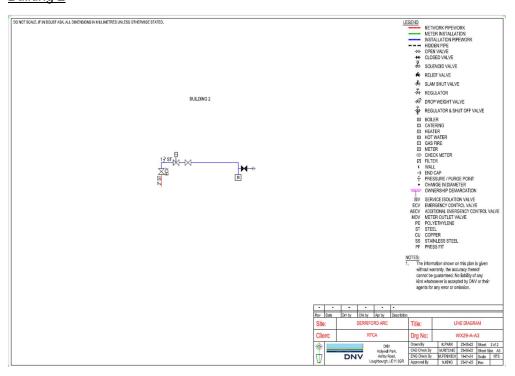
7 ANNEXES

Gas Line Drawings

Building 1



Buildng 2



Site Gas Network Layout Drawing

