

Group A: Induction to Gas Team Leader

This training specification has been developed from the gas team leader standard and details the **minimum** training specification, as agreed by industry employers, to deliver the core skills and knowledge required by persons working within the gas industry.

The specification details the critical requirements for EIGHTEEN mandatory modules. All work must be carried out to approved procedures and practices and in accordance with company and statutory health, safety and environmental requirements.

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Module IND01 Health, Safety and the Environment

This training specification has been developed as part of the gas team leader standard for both service layer and main layer. The specification details the required skills, knowledge and behaviour that establish good working practices and ensure compliance with the key requirements of health, safety and environmental legislation.

The specification is the minimum core standard of these requirements but does not preclude employers from using their relevant company specific procedures and documentation to enhance the skills and knowledge of the learner. Any such enhancements should be documented in the respective company / learning provider training programme.

What does this specification look like?

Gas network team leaders need to be able to understand the requirements of:

- HS&E1 Risk Assessments
- HS&E2 Personal Protective Equipment (PPE)
- HS&E3 Manual Handling
- HS&E4 Control of Substances Hazardous to Health
- HS&E5 Confined Space Awareness
- HS&E6 Vibration
- HS&E7 Noise
- HS&E8 RIDDOR

What do I need to take this module?

Candidates to be **assessed** as competent in this area must have successfully completed the criteria shown in the unit.

No other evidence will be accepted as an equivalent level of achievement for this unit.

There are no pre-requisites to undertaking this unit.

The GAS Utility SHEA SMLM08 is a post requisite of this unit.

Knowledge and Understanding

To achieve this unit, you will need to know and understand:

- K1. The purpose and basic requirements, relating to health, safety and environmental statutory acts and regulations relating to the industry, including:
 - a) Health and Safety at Work Act 1974
 - b) Management of Health & Safety at Work Regulations 2003
 - c) Control of Substances Hazardous to Health (COSHH) Regulations 2002
 - d) The Environmental Protection Act 1990

- K2. The roles and responsibilities of employees and employers in relation to the protection of health, safety and the environment in the workplace
- K3. The meaning of the terms “risk” and “hazard” and how to identify hazards and rate the level of risk in the workplace
- K4. The organisational procedures for accidents, incidents and emergencies to include:
 - a) Fire
 - b) Injury to self and others
 - c) Threat of terrorism
 - d) Hazardous occurrences and near misses
- K5. The importance of correct storage of tools, equipment and materials
- K6. The limitations of own job responsibility and how to report any work related problems
- K7. The benefits and importance of:
 - a) Maintaining a tidy workplace, with access and egress routes (entry and exits) free from obstruction
 - b) Using equipment safely and for the purpose intended
 - c) Observing organisational safety rules, signs and hazard warnings
 - d) Taking measures to protect self and others from harm
- K8. The control measures used in relation to a range of hazardous substances used in the gas industry, including:
 - a) Harmful substances and chemicals
 - b) The properties of natural gas and other flammable gases (butane and propane)
 - c) The properties of the products of combustion of natural gas
- K9. The meaning of warning signs and symbols used in the UK for the main groups of hazardous substances and the precautions that need to be taken
- K10. The company’s environmental practices and procedures and the potential effects on the environment of companies and individuals not complying with good environmental practices
- K11. Where to find information relating to the company’s health, safety and environmental policies and procedures, including identification of qualified first aiders and where to locate first aid facilities
- K12. The information to be provided to a member of the public who reports a gas escape or gas related emergency to you

The following must also be included as part of this unit:

Risk assessments

- P1. Identify workplace situations and conditions which could be classed as hazards
- P2. Carry out a risk assessment of a workplace identifying a range of hazards
- P3. Review and update your risk assessment, through situational awareness
- K1. The meaning of the terms “risk” and “hazard”
- K2. How to carry out a risk assessment in a workplace

- K3. The reasons and benefits of carrying out risk assessments
- K4. The concept of situational awareness, identifying hazards and controlling risks in a changing working environment
- K5. Where to find information and guidance in relation to company risk assessments
- K6. The requirements of current relevant legislation, regulations and company procedures in relation to risk assessment

Personal protective equipment

- P1. Identify the PPE required for your own job role
- P2. Carry out a pre use inspection of PPE including checks for defects / expiry dates
- P3. Use the range of PPE required for your job role and store appropriately after use
- K1. The company process for carrying out a workplace risk assessment
- K2. Where PPE fits into the hierarchy of hazard control and protection
- K3. How to carry out an inspection of PPE and check for defects / expiry dates
- K4. How to use the range of PPE required for your job role and store appropriately after use
- K5. The importance of reporting / replacing defective or missing PPE

Manual handling

- P1. Carry out a risk assessment for the movement of a load using manual handling techniques
- P2. Apply the correct moving and handling principles:
 - a) When lifting alone
 - b) With the assistance of others
- K1. The main causes of back pain and physical effects on the body (WRULDs)
- K2. How to prevent back injury and other WRULDs from occurring in the work place
- K3. The purpose and requirements of the Manual Handling Regulations and how to apply them
- K4. How to carry out a risk assessment prior to a manual handling operation
- K5. The hazards of using incorrect lifting techniques
- K6. The correct manual handling techniques:
 - a) When lifting alone
 - b) With the assistance of others
- K7. Your responsibility to others when lifting as part of a team

Control of substances hazardous to health

- P1. Use a COSHH assessment
- P2. Identify hazard warning labels and suitable containers
- P3. Respond to situations where substances or containers lack identifying signs or labels
- P4. Protect yourself and others from harmful substances found naturally in the environment,

such as dusts or biological hazards

- K1. The categories of harmful substances that you may encounter at work
- K2. How to apply COSHH assessments
- K3. The meaning of hazard warning labels and the importance of using suitable containers
- K4. The company procedures to deal with situations where substances or containers lack identifying signs or labels
- K5. How to protect yourself and others from harmful substances which occur in the environment, such as dusts or biological hazards
- K6. The correct action to be taken in the event of spillage of substances

Confined space awareness

- K1. State the definition of a confined space and the requirements of the confined spaces legislation
- K2. List the potential confined spaces which could be encountered at work:
 - a) Roof spaces
 - b) Under wooden floors
 - c) Cellars
 - d) Plant rooms
 - e) Duct rooms
 - f) Metering or governor houses
 - g) Trenches and excavations
- K3. Understand the potential dangers when working in restricted work areas and confined spaces
- K4. Describe the training and safety requirements before working in confined spaces
- K5. Explain potential solutions for the removal of the foreseeable risk in a confined space

Vibration

- K1. Understand the requirements for the Control of Vibration at Work Regulations 2005
- K2. Understand what hand arm vibration is
- K3. Understand when vibration is hazardous
- K4. Understand the health affects that vibration can cause
- K5. Recognise the early signs and symptoms of hand arm vibration syndrome
- K6. Know which equipment used in the workplace could lead to contracting hand arm vibration syndrome
- K7. Recognise the alternative techniques which may be available
- K8. Know the exposure action value (EAV) for given equipment
- K9. Know the exposure limit value (ELV) for given equipment
- K10. Understand the action to be taken in the event of the EAV or ELV being exceeded
- K11. Understand the equipment requirements to assist with the reduction of vibration

- K12. Recognise the importance of regular attendance at health surveillance for person who use vibrating tools
- K13. Understand the importance of immediately reporting any signs or Symptoms of HAVS

Noise

- K1. Understand the requirements for the Control of Noise at Work Regulations 2005
- K2. Understand the health effects of exposure to noise at work
- K3. Recognise situation where you may be exposed to noise
- K4. Know the simple listening test to determine if you are in a noise affected area
- K5. Know which equipment used in the workplace generates noise
- K6. Recognise the lower and upper exposure action values and exposure limit values for daily or weekly exposure
- K7. Recognise the lower and upper exposure action values and exposure limit values for peak sound pressure
- K8. Recognise the signage where the compulsory use of hearing protection is required
- K9. Understand when and how to use hearing protection including the pre-use checks and maintenance requirements
- K10. Recognise the importance of regular attendance at health surveillance for person who work in noisy environments

RIDDOR

- K1. Understand the requirements of the Reporting of Injuries, Diseases and Dangerous Occurrences Regulations 2013
- K2. Understand company specific reporting procedures for incidents which occur at work
- K3. Understand which accidents require RIDDOR reporting and which only require reporting within the company or organisation
- K4. Recognise the types of reportable injury including:
 - a) Death
 - b) Specified injuries
 - c) Over 7 day injuries
 - d) Injuries to non-workers
 - e) Reportable occupational diseases
 - f) Reportable dangerous occurrences
 - g) Reportable gas incidents
- K5. Know what is exempt from requiring a report
- K6. Know how to report incidents and accidents through either your company communication channels or directly to the HSE
- K7. Know the time line for reporting of any such occurrences

Module IND02 Personal Safety

This training specification has been developed as part of the gas team leader standard for both service layer and main layer. The specification details the required skills, knowledge and behaviour to develop an apprentice's skills and knowledge of personal safety and security; it covers precautions to be taken when working alone, recognising situations which could lead to conflict and how to manage such situations.

The specification is the minimum core standard of these requirements but does not preclude employers from using their relevant company specific procedures and documentation to enhance the skills and knowledge of the learner. Any such enhancements should be documented in the respective company / learning provider training programme.

What does this specification look like?

Gas network team leaders need to be able to understand and identify:

PS1 Issues of personal safety and security

PS2 The appropriate action to take to maintain personal safety and security

PS3 The signs of radicalisation

What do I need to take this module?

Candidates to be **assessed** as competent in this area must have successfully completed the criteria shown in the unit.

No other evidence will be accepted as an equivalent level of achievement for this unit.

There are no pre-requisites to undertaking this unit.

Performance Criteria

To achieve this unit you will need to be able to:

Identify issues of personal safety and security:

- P1. Assess potential risks to your personal safety and security arising in the immediate working environment
- P2. Identify potential risks in one-to-one sessions and take appropriate preventative action
- P3. Identify potential risks arising from activities that have to take place outside normal working hours or in uncontrolled environments and take appropriate preventative action
- P4. Assess the risks involved in situations involving conflict, challenge or heightened states of emotion and plan appropriate action
- P5. Adopt working practices that will minimise exposure to potentially dangerous situations

Take appropriate action to maintain personal safety and security

- P6. Conduct interviews and one-to-one sessions in safe and accessible locations
- P7. Make sure other colleagues are aware of your planned activities and their approximate duration
- P8. Identify potentially difficult situations or events and plan sessions in a manner that will contain or defuse them where possible
- P9. Review any situations about which you are uncertain with senior colleagues and agree an appropriate course of action
- P10. Follow agreed procedures in the event of emergencies

Knowledge and Understanding

To achieve this unit, you will need to know and understand:

- K1. Organisational policies on personal safety and security
- K2. Sources of information and advice on ways of maintaining personal safety and security
- K3. How to identify situations and contexts in which personal safety and security must be addressed
- K4. Likely threats to personal safety and security and how to predict them
- K5. Acceptable professional action that can be taken to minimise or prevent threats to personal safety and security
- K6. Ways of managing conflict and confrontation
- K7. The limits of your own authority and responsibility and how to operate within them
- K8. Reporting procedures in the event of emergencies and incidents
- K9. Information from other agencies affecting assessment of risk and personal safety

Identifying the signs of radicalisation

- K10. Understand what radicalisation is including those stemming from extreme religious, political or social views?
- K11. Understand what leads people to form such views; misguidance, misunderstanding, jealousy, anger, injustice, resentment or fear
- K12. Understand when persons are more susceptible to radicalisation including:
 - a) Struggling to fit in
 - b) Feels neglected
 - c) Feels they have little or no prospects or purpose in life
 - d) Is grieving the loss of a loved one
 - e) Has failed examinations or assessments
 - f) Has been involved in criminal behaviour
- K13. Recognise the signs of persons who may have been or are being radicalised including:

- a) Physical changes; head shaving, beard growing, change in appearance, tattoos with messages or a change in appearance
- b) Social changes; becomes distant from friends and family, socially withdrawn, has friends who are radicals, uses extremist internet and social media sites
- c) Emotional and verbal changes; exhibits extreme religious intolerance, paranoia, delusion, seeks revenge, sympathises with radical groups, advocates violence and criminal behaviour

K14. Understand what to do and who to consult with if you suspect a person is being radicalised

Module IND03 Asbestos Awareness

This training specification has been developed as part of the gas team leader standard for both service layer and main layer. The specification details the required skills, knowledge and behaviour to develop an apprentice's awareness of the effects of asbestos to the human body, including the requirements as listed in the specification below. This unit must be separately certificated on successful completion and the certificate must carry a validity of 12 months from the date of the training.

The specification is the minimum core standard of these requirements but does not preclude employers from using their relevant company specific procedures and documentation to enhance the skills and knowledge of the learner. Any such enhancements should be documented in the respective company / learning provider training programme.

What does this specification look like?

Gas network team leaders need to be able to understand and identify:

- ASBA1 The properties of asbestos and its effect on health
- ASBA2 The types and uses and likely occurrences of asbestos in the workplace
- ASBA3 The procedures to deal with an uncontrolled release of asbestos
- ASBA4 How to avoid the risk of exposure to asbestos

What do I need to take this module?

Candidates to be **assessed** as competent in this area must have successfully completed the criteria shown in the unit.

No other evidence will be accepted as an equivalent level of achievement for this unit. There are no pre-requisites to undertaking this unit.

Knowledge and Understanding

To achieve this unit, you will need to know and understand:

- K1. The properties of asbestos and its effects on health

- a) The above must include the increased risk for asbestos workers who smoke
- K2. The types, uses and likely occurrence of asbestos and asbestos containing materials in buildings and plant
- K3. How to identify the different types
- K4. The purpose and requirements of the Control of Asbestos at Work Regulations
- K5. How to avoid the risks from asbestos, confirmation that asbestos does not exist before building work commences
- K6. The general procedures to be followed to deal with an emergency, e.g. an uncontrolled release of asbestos dust into the workplace
- K7. The company reporting procedure for the identification of asbestos in a building and / or following an uncontrolled release

Module IND04 Emergency First Aid

This training specification has been developed as part of the gas team leader standard for both service layer and main layer. The specification details the required skills, knowledge and behaviour to develop an apprentice's competence in basic first aid practices and include the requirements listed in the specification below

The specification is the minimum core standard of these requirements but does not preclude employers from using their relevant company specific procedures and documentation to enhance the skills and knowledge of the learner. Any such enhancements should be documented in the respective company / learning provider training programme.

What do I need to take this module?

Candidates to be **assessed** as competent in this area must have successfully completed the criteria shown in the unit.

No other evidence will be accepted as an equivalent level of achievement for this unit. There are no pre-requisites to undertaking this unit.

Performance Criteria

To achieve this unit you will need to be able to:

- P1. Identify and assess casualties
- P2. Care for casualties with a range of first aid requirements
- P3. Recognise the symptoms and treat the effects of:
 - a) Fainting
 - b) Bleeding (minor and severe)
 - c) Seizures
 - d) Choking (adult)
 - e) Burns

- f) Shock (trauma)
 - g) Electric shock on the body
- P4. Carry out the actions to perform the resuscitation of a casualty (adult CPR)
- P5. Carry out the care of an unconscious casualty

Knowledge and Understanding

To achieve this unit, you will need to know and understand:

- K1. The responsibilities and requirements of a first aider at work
- K2. The requirements of the health and safety (first aid) regulations
- K3. How to react and what to do in the event of an emergency first aid situation
- K4. How to risk assess a situation before tending to a casualty
- K5. How to communicate and care for casualties
- K6. How to recognise and treat the effects and symptoms of the following:
 - a) Fainting
 - b) Bleeding (minor and severe)
 - c) Seizures
 - d) Choking (adult)
 - e) Burns
 - f) Shock (trauma)
 - g) Electric shock (including the dangers of treating a casualty suffering an electric shock)
- K7. How to resuscitate a casualty
- K8. How to care for an unconscious casualty

Module IND05 Operational Procedures

This training specification has been developed as part of the gas team leader standard for both service layer and main layer. The specification details the required skills, knowledge and behaviour to develop an apprentice's ability to correctly locate and apply appropriate operational procedures.

The specification is the minimum core standard of these requirements but does not preclude employers from using their relevant company specific procedures and documentation to enhance the skills and knowledge of the learner. Any such enhancements should be documented in the respective company / learning provider training programme.

What do I need to take this module?

Candidates to be **assessed** as competent in this area must have successfully completed the criteria shown in the unit.

No other evidence will be accepted as an equivalent level of achievement for this unit.

There are no pre-requisites to undertaking this unit.

Performance Criteria

To achieve this unit you will need to be able to:

- P1. Locate operational procedures in your workplace
- P2. Select the operational procedure specific to your task and any related procedures
- P3. Carry out all work to operational procedures
- P4. Contribute to the maintenance of operational procedures through feedback

Knowledge and Understanding

To achieve this unit, you will need to know and understand:

- K1. How to locate operational procedures in your workplace
- K2. How to select task specific operational procedures and any others related to it
- K3. How to apply operational procedures to tasks and the importance of them
- K4. The methods by which procedures are maintained and updated and how to keep up with changes

Module IND06 Fire Control

This training specification has been developed as part of the gas team leader standard for both service layer and main layer. The specification details the required skills, knowledge and behaviour to develop an apprentice's understanding of the causes of fires and how to respond safely upon the event of a fire in line with company procedures. They should also have knowledge and be assessed on the use of the types of fire extinguishers available to them.

The specification is the minimum core standard of these requirements but does not preclude employers from using their relevant company specific procedures and documentation to enhance the skills and knowledge of the learner. Any such enhancements should be documented in the respective company / learning provider training programme.

What do I need to take this module?

Candidates to be **assessed** as competent in this area must have successfully completed the criteria shown in the unit.

No other evidence will be accepted as an equivalent level of achievement for this unit.
There are no pre-requisites to undertaking this unit.

Performance Criteria

To achieve this unit you will need to be able to:

- P1. Select the appropriate type of fire extinguishers for the fire it is to be used against
- P2. Check the fire extinguisher for correct operation prior to approaching the fire
- P3. Safely operate a fire extinguisher to extinguish a fire in the correct manner

Knowledge and Understanding

To achieve this unit, you will need to know and understand:

- K1. The action to take in the event of a fire
- K2. The causes of fire and the elements required to start a fire
- K3. The fire triangle
- K4. The practices to reduce the risk of fire occurring
- K5. The company procedures for dealing with fire situations
- K6. How to identify the differing content of fire extinguishers and the type of fire each extinguisher can be used against
- K7. The correct way to operate a fire extinguisher to extinguish a fire
- K8. The consideration of the greater risk i.e. the escaping gas or the effects of thermal radiation from a fire

Module IND07 Drug and Alcohol Awareness

This training specification has been developed as part of the gas team leader standard for both service layer and main layer. The specification details the required skills; knowledge and behaviour to develop an apprentice's understanding of the adverse effects of drug and alcohol use in the workplace and include the requirements listed.

The specification is the minimum core standard of these requirements but does not preclude employers from using their relevant company specific procedures and documentation to enhance the skills and knowledge of the learner. Any such enhancements should be documented in the respective company / learning provider training programme.

What do I need to take this module?

Candidates to be **assessed** as competent in this area must have successfully completed the criteria shown in the unit.

No other evidence will be accepted as an equivalent level of achievement for this unit. There are no pre-requisites to undertaking this unit.

Knowledge and Understanding

To achieve this unit, you will need to know and understand:

- K1. The types of prescription, legal and illegal drugs / substances and the effects they can have on the body, including:
 - a) Prescription drugs - stimulants, opiates and tranquilisers / sedatives
 - b) Uppers - cocaine (blow, Charlie, coke); crack (rocks, freebase); crystal methamphetamine (ice, LA crystal, Hawaiian salt); Ecstasy (XTC, Adam, MDMA); Methamphetamine (speed; tik, crystal meth);
 - c) Downers - heroine (smack, mud, china white, brown); Mandrax (whites, buttons);
 - d) Hallucinogens- cannabis (marijuana, weed, dagga, dope, grass, pot, ganja, hash); LSD (acid, microdot, white lightening)
- K2. How to identify types of prescription, legal and illegal drugs and substances, including:
 - a) Prescription drugs - stimulants, opiates and tranquilisers / sedatives
 - b) Uppers - cocaine (blow, Charlie, coke); crack (rocks, freebase); crystal methamphetamine (ice, LA crystal, Hawaiian salt); Ecstasy (XTC, Adam, MDMA); Methamphetamine (speed; tik, crystal meth);
 - c) Downers - heroine (smack, mud, china white, brown); Mandrax (whites, buttons);
 - d) Hallucinogens- cannabis (marijuana, weed, dagga, dope, grass, pot, ganja, hash); LSD (acid, microdot, white lightening)
- K3. How to identify the effects that differing legal and illegal drugs can have on a person
- K4. The company policy and procedures in relation to the use of drugs at work
- K5. How to identify the effects alcohol can have on a person
- K6. How to establish when a person is using drugs or alcohol in the workplace
- K7. What the company policy and procedures state in relation to the use of alcohol at work
- K8. Where to find help and support in relation to alcohol or drug related problems

Module IND08 Equality & Diversity

This training specification has been developed as part of the gas team leader standard for both service layer and main layer. The specification details the required skills, knowledge and behaviour to develop an apprentice's understanding and application of equality and diversity in the workplace and include the requirements listed.

The specification is the minimum core standard of these requirements but does not preclude employers from using their relevant company specific procedures and documentation to enhance the skills and knowledge of the learner. Any such enhancements should be documented in the respective company / learning provider training programme.

What do I need to take this module?

Candidates to be **assessed** as competent in this area must have successfully completed the criteria shown in the unit.

No other evidence will be accepted as an equivalent level of achievement for this unit.
There are no pre-requisites to undertaking this unit.

Knowledge and Understanding

To achieve this unit, you will need to know and understand:

- K1. The legislation, employment regulations and policies, and codes of practice that apply to the promotion of equality and diversity and how you need to apply these
- K2. The benefits of diversity and the promotion of equality
- K3. The wide variety of forms that discrimination may take and how these manifest themselves
- K4. How inequality and discrimination affects individuals, groups and communities and society as a whole
- K5. The importance of promoting equality and valuing of diversity in the workplace
- K6. The effect of cultural differences on verbal and non-verbal communication
- K7. How to behave and communicate in ways that:
 - a) Support equality and diversity
 - b) Do not exclude or offend people
 - c) Challenge discrimination effectively
 - d) Respect individuals' differences
 - e) Do not abuse the status and power that you have
- K8. How your behaviour contributes to your organisation's culture and your responsibility for developing a positive culture for all
- K9. How to provide the information that individuals are entitled to receive and ensure it is clear and helpful
- K10. The actions (yours and others') that undermine equality and diversity and what to do about this (including when these people are senior to you)
- K11. What to do about systems and structures when they do not promote equality and value diversity
- K12. The actions you can take to help other people promote equality and value diversity and how to do this effectively
- K13. The actions you can take to value the people you are interacting with and enable them to interact with you
- K14. Why you should seek support when you are having difficulty promoting equality and valuing diversity, where this support can be gained and how to use it effectively

Module IND09 Customer Focus & Working with Others

This training specification has been developed as part of the gas team leader standard for both service layer and main layer. The specification details the required skills, knowledge and behaviour to develop an apprentice's understanding and application of providing a consistently good service to customers and working with their colleagues and contractors in the gas industry to include the requirements listed.

The specification is the minimum core standard of these requirements but does not preclude employers from using their relevant company specific procedures and documentation to enhance the skills and knowledge of the learner. Any such enhancements should be documented in the respective company / learning provider training programme.

What does this specification look like?

Gas network team leaders need to be able to understand the requirements of:

- CFWO1 Working with Others
- CFWO2 Customer Focus
- CFWO3 Interpersonal Skills

What do I need to take this module?

Candidates to be **assessed** as competent in this area must have successfully completed the criteria shown in the unit.

No other evidence will be accepted as an equivalent level of achievement for this unit. There are no pre-requisites to undertaking this unit.

Performance Criteria

To achieve this unit you will need to be able to:

- P1. Communicate and interact with other employees in a professional and courteous manner
- P2. Communicate and interact with other customers in a professional and courteous manner
- P3. Recognise when to give support to others in the work role and provide it in a timely manner
- P4. Listen to others views and opinions in working situations and be open to others ideas
- P5. Communicate your views and opinions in working situations in an effective manner
- P6. Plan for tasks to be carried out providing clear information
- P7. Communicate in a way that respects others and meets company standards for behaviours

- P8. Engage with customers and handle their enquiries effectively
- P9. Listen effectively, ask questions and respond fully to customer requests
- P10. Identify ways which help to make interaction with customers a positive experience
- P11. Describe the company policy and procedures in relation to customer care

Knowledge and Understanding

To achieve this unit, you will need to know and understand:

Working with Others

- K1. How to meet the organisation's values and behaviours requirements and take responsibility for your behaviour
- K2. The importance and benefits of communicating and interacting with other employees in a professional and courteous manner
- K3. How to recognise the impact your actions have on others
- K4. How to recognise when to give support to others in the work role
- K5. The benefits of listening to others views and opinions in working situations
- K6. How to communicate your views and opinions in working situations in an effective manner
- K7. How the planning of tasks can support working operations

Customer Focus

- K8. Your organisation's services or products
- K9. Your organisation's procedures and systems for delivering customer service, including who your customer is and your role in delivering a good service to them
- K10. How to interact with customers to reach agreed outcomes
- K11. Methods or systems for measuring an organisation's effectiveness in delivering customer service
- K12. Your organisation's procedures and systems for checking service delivery
- K13. Your organisation's requirements for health and safety in your area of work

Interpersonal Skills

- K14. The importance of representing the company in a professional manner
- K15. The effects of not representing the company in a professional manner
- K16. How to listen effectively, ask questions and respond fully to customer requests
- K17. Why it is important to give customers a positive experience
- K18. How to apply the company policy and procedures in relation to customer interaction

Module IND10 Security Asset (including IT) Protection

This training specification has been developed as part of the gas team leader standard for both service layer and main layer. The specification details the required skills, knowledge and behaviour to develop an apprentice's understanding and application when providing security / asset protection in the gas industry, including IT security and protection. This will also include the effects that adverse personal social media information may have on an individual.

The specification is the minimum core standard of these requirements but does not preclude employers from using their relevant company specific procedures and documentation to enhance the skills and knowledge of the learner. Any such enhancements should be documented in the respective company / learning provider training programme.

What do I need to take this module?

Candidates to be **assessed** as competent in this area must have successfully completed the criteria shown in the unit.

No other evidence will be accepted as an equivalent level of achievement for this unit. There are no pre-requisites to undertaking this unit.

Performance Criteria

To achieve this unit you will need to be able to:

- P1. Identify the need for the protection of assets, including IT systems and data
- P2. Report perceived threats to the correct person
- P3. Record the required information in the event of a security breach or a threat to security
- P4. Follow organisational procedures regarding the personal use of IT at work
- P5. Follow procedures relating to security threats and asset protection
- P6. Safeguard site security, including IT systems and data
- P7. Carry out approved security measures relating to your workplace, including maintaining security of information
- P8. Follow organisational procedures for backing up IT data
- P9. Follow company procedures for receiving visitors to site and the need to:
 - a) Allow only authorised visitors access to site
 - b) Challenge unauthorised visitors
 - c) Provide site inductions
 - d) Follow site visitor rules including the need to be accompanied, where relevant
 - e) Account for all people on site, including recording their departure from site

- f) Ensure visitors do not inadvertently compromise site security, including their ways of working

Knowledge and Understanding

To achieve this unit, you will need to know and understand:

- K1. What is meant by the term “assets” and list a minimum of two assets relevant to your industry"
- K2. Why those assets need protection and your role in providing that
- K3. The range of possible threats that could impact on those assets
- K4. How those threats could affect:
 - a) The assets
 - b) Customers
 - c) The public
 - d) The environment
 - e) IT systems and data
- K5. How to report perceived threats to assets and systems and who to report them to
- K6. The type, quality and quantity of information that needs to be recorded in the event of discovery of a security breach or a threat to asset security
- K7. How to locate procedures relating to security threats and asset protection and your responsibilities within them
- K8. The importance of site security in relation to asset protection and health & safety
- K9. The range of security measures relevant to your sites and industry
- K10. What the procedures for visitors to site are and the importance of:
 - a) Allowing only authorised visitors access to site
 - b) Challenging unauthorised visitors
 - c) Providing site inductions
 - d) Following site visitor rules including the need to be accompanied, where relevant

Media posts

- K11. Understand the affect that information posted on personal social media accounts may have including:
 - a) Personal affect
 - b) Company reputation
- K12. Recognise the affect that information posted on company social media accounts may have including:
 - a) Personal affect
 - b) Company reputation
- K13. Understand the company policy for disclosure of information through social media and e-mail including:
 - a) If personal social media may be used during working hours

- b) What the company classes as acceptable or unacceptable personal information, comments or images
 - c) What the company classes as acceptable or unacceptable company information, comments or images
 - d) What the company classes as acceptable or unacceptable customer / colleague information, comments or images
- K14. Understand the rights of the company to manage and monitor the image of their organisation across all media and other such information in the public domain
- K15. Understand the implications of improper use of all varieties of public media including:
- a) Personal
 - b) Company reputation

Module IND11 Gas Industry Regulation

This training specification has been developed as part of the gas team leader standard for both service layer and main layer. The specification details the required skills, knowledge and behaviour to develop an apprentice's understanding of regulations that affect works they may carry out in the gas industry. This unit raises awareness of these regulations and give an understanding of how such regulation impacts their day-to-day activities.

The specification is the minimum core standard of these requirements but does not preclude employers from using their relevant company specific procedures and documentation to enhance the skills and knowledge of the learner. Any such enhancements should be documented in the respective company / learning provider training programme.

What does this specification look like?

Gas network team leaders need to be able to understand the requirements of:

- GIR1 The Pipeline Safety Regulations 1996
- GIR2 The Pressure Systems Safety Regulations 2000
- GIR3 The Gas Safety (Management) Regulations 1996
- GIR4 The Construction (Design and Management) Regulations 2015 (CDM)
- GIR5 Gas Safety (Installation and Use) Regulations 1998

What do I need to take this module?

Candidates to be **assessed** as competent in this area must have successfully completed the criteria shown in the unit.

No other evidence will be accepted as an equivalent level of achievement for this unit. There are no pre-requisites to undertaking this unit.

Performance Criteria

To achieve this unit you will need to be able to:

- P1. Locate and use company and / or industry procedures relating to regulations
- P2. Report any situation which is considered non-compliant with regulation

Knowledge and Understanding

To achieve this unit, you will need to know and understand your work related requirements of the following:

The Pipeline Safety Regulations 1996

- K1. The purpose of the Pipeline Safety Regulations 1996
- K2. The approach used under the regulations
- K3. What defines a pipeline and what is considered to be part of a pipeline system and what is not?
- K4. The limits of a pipeline on a gas distribution network
- K5. The duties of pipeline operators
- K6. The management of pipeline safety
- K7. The arrangements required to prevent damage to pipelines
- K8. The definition of a major action hazard pipeline
- K9. The basic consideration for the design, any subsequent modification and maintenance of pipelines
- K10. The pressure tiers in which pipelines operate and the significance of these
- K11. The requirements of any safety systems
- K12. The pipeline access and maintenance requirements
- K13. The materials suitable for use on the various pressure tiers of pipelines including the design specification criteria and certification as appropriate
- K14. The construction and operation of pipelines including the basis of testing and commissioning requirements
- K15. The actions to be taken following and emergency situation associated with a pipeline
- K16. The inter-relationship between the Pipeline Safety Regulations, Pressure System Safety Regulations, Gas Safety (Management) Regulations and the Construction (Design and Management) Regulations

The Pressure Systems Safety Regulations 2000

- K1. The purpose of the Pressure Systems Safety Regulations 2000
- K2. The primary concerns of the regulations
- K3. What defines a pipeline, pipework, protective device and a pressure system?
- K4. What is included on a gas distribution network under the Pressure System Regulations

- K5. What the role of the competent person is under PSSR
- K6. The examination and inspection requirements including the use of written schemes of examination
- K7. The basic consideration for the design, installation, any subsequent modification and maintenance of pressure systems
- K8. The requirements for the keeping of records relating to pressure systems
- K9. The actions to be taken following an emergency situation associated with a pressure system
- K10. Understand the training and competence requirements for person who work with pressure systems
- K11. The inter-relationship between the Pressure System Safety Regulations, Pipeline Safety Regulations, Gas Safety (Management) Regulations and the Construction (Design and Management) Regulations

The Gas Safety (Management) Regulations 1996

- K1. What the Gas Safety (Management) Regulations 1996 apply to
- K2. The four main areas covered by the regulations
- K3. The scope of the regulation in relation to the UK gas infrastructure i.e. to what do they apply
- K4. The requirements for having a "safety case" and what the general requirements of a safety case are including revisions and the duty to comply
- K5. The duties placed on persons conveying gas and the requirement for co-operation with others associated with them
- K6. The requirement for a continually staffed emergency contact centre, where persons can report gas escapes and other gas related emergencies
- K7. The information to be relayed to any person reporting a gas escape, emissions of carbon monoxide, fires and explosions where gas is suspected to be involved
- K8. The requirement for preventing the gas escaping within 12 hours of the initial report
- K9. The rights of a gas transporter or emergency service provider under the Gas Safety (Rights of Entry) Regulations 1996
- K10. The reporting actions to be taken in the event of a fire or explosion caused by an escape of gas
- K11. The competence and training requirements for persons working on gas networks
- K12. The inter-relationship between the Gas Safety (Management) Regulations, Pressure System Safety Regulations, Pipeline Safety Regulations, and the Gas Safety (Installation and Use) Regulations

The Construction (Design and Management) Regulations 2015 (CDM)

- K1. Where the Gas Safety (Management) Regulations 1996 apply

- K2. The roles, duties and responsibilities of clients, domestic clients, designers, principle designers, principal contractors, contractors and workers
- K3. The 4 key elements for ensuring construction health and safety
- K4. The interrelationship between the CDM Regulations and other regulations i.e. Working at Height, Asbestos etc.
- K5. The scope of the regulations, what is defined as construction work in the gas industry
- K6. The requirements for the production of a health and safety file and what it should contain
- K7. The parameters under which a project becomes notifiable
- K8. The requirements of CDM 2015 apply whether or not the project is notifiable
- K9. The requirements for cooperation with other persons
- K10. The requirement to report any occurrence which is likely to endanger their own safety or the safety of others
- K11. To ensure they have the necessary training, skills, knowledge and experience to complete the task in a way that secures health and safety
- K12. The importance of complying with policy, procedures and safe systems of work
- K13. The requirement for the identification of risks to health and safety the use of risk assessment documentation
- K14. Where appropriate, the requirement for the provision of suitable welfare facilities
- K15. The requirement for the management, inspection and monitoring of construction sites in a way that secures health and safety
- K16. The requirement for the provision of appropriate supervision
- K17. The importance of site inductions
- K18. The methods to be used to prevent unauthorised access to the site through appropriate site security measures
- K19. The requirement for keeping a site safe and in good order
- K20. The requirements for ensuring the stability of structures, this includes excavations and trenches
- K21. The requirements for the protection and avoidance of underground and over ground plant
- K22. The provision of suitable emergency procedures and emergency escape routes where required
- K23. The requirement for the provision of fire-fighting equipment
- K24. The requirement for suitable and sufficient lighting
- K25. The inter-relationship between the Construction (Design and Management) Regulations, Pressure System Safety Regulations and the Pipeline Safety Regulations

Gas Safety (Installation and Use) Regulations 1998

- K1. The scope of the Gas Safety (Installation and Use) Regulations
- K2. What constitutes work in relation to a gas fitting?

- K3. The training, competence and registration requirements for person undertaking work on gas fittings, meters or appliances
- K4. The requirements for the installation of meter boxes or housings
- K5. The actions to be taken when encountering an appliance or part of a gas installation that is considered to be faulty
- K6. The requirements for the provision of a suitable electrical continuity bond
- K7. Where the overlap between the Pipeline Safety Regulations and the Gas Safety (Installation and Use) Regulations occurs

Module IND12 Gas Industry Overview and Appreciation

This training specification has been developed as part of the gas team leader standard for both service layer and main layer. The specification details the information required to develop an apprentice's understanding of how a gas network operates. This should cover an overview of all gas-engineering processes involved from the terminal to the consumer's gas meter.

The specification is the minimum core standard of these requirements but does not preclude employers from using their relevant company specific procedures and documentation to enhance the skills and knowledge of the learner. Any such enhancements should be documented in the respective company / learning provider training programme.

What do I need to take this module?

Candidates to be **assessed** as competent in this area must have successfully completed the criteria shown in the unit.

No other evidence will be accepted as an equivalent level of achievement for this unit. There are no pre-requisites to undertaking this unit.

Knowledge and Understanding

To achieve this unit, you will need to know and understand:

- K1. What forms a gas network and how it operates
- K2. The basic components of plant and equipment that are used in gas transmission and distribution networks
- K3. What forms a gas supply system, from transmission to distribution network, and how they operate
- K4. The process from arrival at gas terminals to national transmission to distribution networks to the customer (beach to meter)
- K5. The basic principles and balancing supply and demand on the UK gas networks

- K6. The basic function and operating principles of a range of common gas network apparatus including:
- a) Storage
 - b) Pressure reduction
 - c) Pipelines
 - d) Service pipes
 - e) Meters

Module IND13 Work at Height

This training specification has been developed as part of the gas team leader standard for both service layer and main layer. The specification details the information required to develop an apprentice's understanding, knowledge and awareness of the relevant legislative and the procedural requirements, used in the gas industry, for working at height.

The specification is the minimum core standard of these requirements but does not preclude employers from using their relevant company specific procedures and documentation to enhance the skills and knowledge of the learner. Any such enhancements should be documented in the respective company / learning provider training programme.

What do I need to take this module?

Candidates to be **assessed** as competent in this area must have successfully completed the criteria shown in the unit.

No other evidence will be accepted as an equivalent level of achievement for this unit. There are no pre-requisites to undertaking this unit.

Performance Criteria

To achieve this unit you will need to be able to:

- P1. Plan a work activity at height including carrying out a risk assessment
- P2. Carry out a work activity at height using correct PPE
- P3. Reduce the risks of work from height by using recognised working practices and methods
- P4. Identify where information and guidance can be gained in relation to work at height

Knowledge and Understanding

To achieve this unit, you will need to know and understand:

- K1. How to identify and reduce the risks associated with work at height

- K2. How to apply your responsibilities as an employee in relation to the Work at Height Regulations 2005
- K3. How to identify types of work activity that would be classed as work at height
- K4. How to plan for a work at height activity and apply the checks and measures required
- K5. How to check to make sure work at height equipment is suitable for use
- K6. The requirements for the use of steps and ladders for work at height activities

Module IND14 Working in Low Risk Confined Spaces

This training specification has been developed as part of the gas team leader standard for both service layer and main layer. The specification details the required skills, knowledge and behaviour to develop an apprentice's understanding of the hazards involved and precautions to be taken when working in low risk confined spaces. This will include atmosphere sampling, methods of safe access and egress and actions to take in the event of an emergency.

The specification is the minimum core standard of these requirements but does not preclude employers from using their relevant company specific procedures and documentation to enhance the skills and knowledge of the learner. Any such enhancements should be documented in the respective company / learning provider training programme.

What does this specification look like?

Gas network team leaders need to be able to understand the requirements of:

- WLRCS1 Prepare to enter and work safely in low risk confined spaces
- WLRCS2 Enter and exit the confined space in a safe manner
- WLRCS3 Use equipment and tools in a safe manner
- WLRCS4 Follow procedures and permit to work requirement
- WLRCS5 Emergency situations
- WLRCS6 Understand relevant health and safety guidance and legislation used
- WLRCS7 Understand the requirements for safe working in confined spaces

What do I need to take this module?

Candidates to be **assessed** as competent in this area must have successfully completed the criteria shown in the unit.

No other evidence will be accepted as an equivalent level of achievement for this unit. There are no pre-requisites to undertaking this unit.

Performance Criteria

To achieve this unit you will need to be able to:

Prepare to enter and work safely in low risk confined spaces

- P1. Prepare and check all equipment is in good order and electrical equipment is fully charged before entering the work site
- P2. Obtain authorisation for entry and relevant health and safety information including permits to work, safe systems of work and risk assessments
- P3. Establish and maintain a safety zone in situations where other people need to be kept clear
- P4. Turn on and check atmospheric monitoring equipment and confirm it is working before entering the confined space

Enter and exit the confined space in a safe manner

- P5. Check atmospheric conditions are safe prior to entering the space
- P6. Set up and inspect access and any rescue equipment to make sure it is safe and fit for purpose prior to use
- P7. Enter and exit the space in line with the safe system of work for entering the confined spaces
- P8. Rectify any problems with the work or other team members through consultation with the authorising engineer

Use equipment and tools in a safe manner and in accordance with manufacturers' specifications

- P9. Inspect all equipment and tools to ensure they are suitable for the job before using them
- P10. Inspect all PPE to ensure it is suitable for use
- P11. Using the specified safe method; place equipment and tools into the confined space, ensuring all equipment and tools are removed from site when work is complete

Follow procedures and permit to work requirement to ensure the work is carried out safely

- P12. Ensure communication methods to be used are operational and suitable for the work
- P13. Ensure a minimum of two persons are on site at all times, with the second person acting as a guard
- P14. Ensure adequate control for the access of people and vehicles is in place around the entry point
- P15. Rectify any problems with the work or other team members through consultation with the authorising engineer
- P16. Respond immediately to any unsafe activity, equipment, or environmental conditions

- P17. Monitor atmospheric conditions at the specified intervals within the confined space and ensure these are logged or recorded
- P18. Ensure all risks are adequately controlled throughout the work activity
- P19. Ensure all specified PPE for the job is used continually and correctly
- P20. Respond to any unsafe condition as indicated by atmospheric monitoring equipment
- P21. On completion make the work area safe and close down the permit to work
- P22. Complete all documentation and pass to the relevant person, ensure all persons are notified of completion of the work

Emergency Situations

- P23. Invoke the emergency evacuation procedures should an unsafe situation occur
- P24. Ensure all personnel exit the space safely and that all persons are accounted for
- P25. Record the details of the emergency and report the incident to the authorising engineer

Knowledge and Understanding

To achieve this unit, you will need to know and understand:

- K1. The behaviours required for working in low risk confined spaces
- K2. How to be vigilant to potential risks and hazards
- K3. Their responsibilities to comply with the main principles of health and safety and environmental legislation and regulations
- K4. Where to find guidance relating to identifying a confined space and how to risk assess for working safely in confined spaces
- K5. How enclosed areas could become confined spaces due to the presence of a hazard
- K6. The specific hazards that can produce a confined space
- K7. How to deal with emergency situations that could arise in a confined space
- K8. How to access company procedures and manufacturers' instructions that relate to the safe use of equipment
- K9. Their role and responsibilities when dealing with any emergencies
- K10. How to deal with injuries to personnel and the members of the public
- K11. The different types of emergency situation that could arise
- K12. The entry and exit procedures for low risk confined spaces
- K13. How to carry out risk and hazards assessments
- K14. The procedures and methods of working suitable to low risk environments and local conditions
- K15. How to reduce the risk to an acceptable level for the work to be carried out
- K16. How to following the requirements of permits to work or other safe systems of work
- K17. How to effectively monitor site conditions and the work activity
- K18. How to resolve problems speedily and with the designated personnel where other people or organisations are involved

- K19. The communications methods for keeping in contact with other people during work in low risk confined spaces
- K20. How to ensure equipment and tools are fit-for-purpose and how to use them safely
- K21. The reporting systems permit controlled work activities and resolving problems
- K22. The procedures for dealing with emergencies
- K23. The communications and reporting systems for emergency situations

Module IND15 Excavation Support systems up to 2.5 Metres Deep

This training specification has been developed as part of the gas team leader standard for both service layer and main layer. The specification details the required skills, knowledge and behaviour to develop an apprentice to be able to install, dismantle and remove; close board support systems, sheet piling support systems, and both mechanical and hydraulic support systems for excavations up to 2.5 metres deep.

The specification is the minimum core standard of these requirements but does not preclude employers from using their relevant company specific procedures and documentation to enhance the skills and knowledge of the learner. Any such enhancements should be documented in the respective company / learning provider training programme.

What do I need to take this module?

Candidates to be **assessed** as competent in this area must have successfully completed the criteria shown in the unit.

No other evidence will be accepted as an equivalent level of achievement for this unit.

IND14 - Working in Low Risk Confined Spaces is a pre-requisite of undertaking this unit.

Performance Criteria

To achieve this unit you will need to be able to:

- P1. Confirm that site specific risk assessments and permit to work systems are in place and that these provide adequate safeguards through working practices
- P2. Identify factors which could deem the excavation a confined space
- P3. Identify potential hazards in the excavation and the chosen support mechanisms according to relevant codes of practice
- P4. Recognise the signs of water ingress and implement appropriate control measures to remove the water
- P5. Describe the site checks that must be completed prior to entering an excavation
- P6. Assess an excavation to determine the most suitable types of support system

- P7. Install, dismantle and remove close board and sheet piling support systems
- P8. Demonstrate how mechanical and hydraulic support systems are used
- P9. Ensure adequate controls are in place to prevent access of unauthorised persons and vehicles in and around the excavation
- P10. Ensure the requirements of the Working at Height Regulations are met
- P11. Provide safe access and egress in to and around the excavation
- P12. Check atmospheric conditions are safe prior to entering the excavation
- P13. Wear all appropriate personal protective equipment (PPE), ensuring it is suitable and in good condition
- P14. Ensure breathing apparatus and fire extinguishers are deployed on site in accordance with company procedures
- P15. Ensure a minimum of two persons are on site at all times, with the second person acting as a guard
- P16. Demonstrate how to safely adjust support mechanisms
- P17. Demonstrate the correct use of tools, plant and equipment
- P18. Demonstrate the controls to be implemented when underground plant and services are exposed
- P19. Respond immediately to any unsafe activity, equipment, or environmental conditions
- P20. Demonstrate how to resolve day to day problems within the responsibilities of your own role
- P21. Report problems and defects in the excavation and its support mechanisms to the relevant person

Knowledge and Understanding

To achieve this unit, you will need to know and understand:

- K1. The hazards associated with water ingress to excavations
- K2. The methods that can be used to safely remove water from excavations
- K3. The environmental considerations when removing water from excavations
- K4. The requirement to keep gullies and water courses clear at all times
- K5. The safety requirements for using mechanical plant and equipment near excavations
- K6. The procedures that apply to the installing, dismantling and removing of excavation support systems
- K7. The current legislative requirements and industry good practice relating to excavation work activities
- K8. The inspection requirements and procedures for all types of excavation support systems
- K9. The importance of ensuring that equipment and tools used in excavation support systems are stored safely and securely
- K10. The importance of good communication within your own team and others when working in excavations
- K11. The human consequences from the collapse of an excavation

K12. Your responsibilities when working in supported excavations and how to comply with procedures, permit systems and good working practices

Module IND16 Anchorage of Mains Operating at ≤ 2 bar

This training specification has been developed as part of the gas team leader standard for both service layer and main layer. The specification details the required skills, knowledge and behaviour to develop an apprentice to be able to understand the requirements for both temporary and permanent anchorage of cap ends and fittings connected to gas mains up to and including 14"/350mm up to and including 2 bar pressure. The apprentice must be made aware of the risk of physical injuries that could be incurred if suitable control measures are not in place.

The specification is the minimum core standard of these requirements but does not preclude employers from using their relevant company specific procedures and documentation to enhance the skills and knowledge of the learner. Any such enhancements should be documented in the respective company / learning provider training programme.

What do I need to take this module?

Candidates to be **assessed** as competent in this area must have successfully completed the criteria shown in the unit.

No other evidence will be accepted as an equivalent level of achievement for this unit.

Whilst there are no pre-requisites of taking this unit, consideration should be given to including this unit when training is being delivered on units SML01-SML02 or MLM01 – MLM04.

Knowledge and Understanding

To achieve this unit, you will need to know and understand:

- K1. The general requirements for the application of anchorage to mains
- K2. The physical injuries that could be sustained through the sudden release of pressure when an end cap fails
- K3. The different types of joints used including; self-locking / self-anchoring and flexible compression
- K4. The safety requirements when working with self-locking / self-anchoring and flexible compression joints including what pipe work materials they can be used on
- K5. The necessary authorisations required prior to using temporary and permanent thrust restraints

- K6. The precautions be taken to ensure existing anchor blocks (on any utility) or any supporting ground is not disturbed
- K7. The prohibited use of vertically driven spikes
- K8. The inspection requirements of temporary thrust restraint systems
- K9. The requirements for any temporary restraint to be designed so as to restrain the main under full pressure test.
- K10. The uses and limitations of self-locking end caps
- K11. The use and selection of struts which may be used on low-pressure systems
- K12. The use and selection of steel struts for medium pressure systems
- K13. The design, installation and general requirements for the use of traverse beams in the following ranges up to 0.4kN, 0.4 - 10.0kN and 10.0kN - 25kN
- K14. The requirements for the restraint of pipe work during flow stopping or cut out operations
- K15. The requirements for the selection of single or three-trench systems of working
- K16. The requirements for additional support to the main when using flow-stopping equipment
- K17. Who has the responsibility for determining the size and specification of any permanent restraint i.e. concrete block
- K18. The shape the thrust block must take and how this is achieved
- K19. What the surface texture of the block must be to achieve maximum cohesion to the surrounding soil
- K20. The correct ratio for the cement: sand: aggregate used in the construction of thrust blocks
- K21. The typical "cure" time for a concrete thrust block
- K22. The additional precautions to be taken in both hot and frosty weather with regard to controlling the "cure" of the concrete
- K23. Back filling requirements
- K24. The requirements of any; permit to work, routine or non-routine operational procedure are met

Module IND17 Breathing Apparatus

This training specification has been developed as part of the gas team leader standard for both service layer and main layer. The specification details the required skills, knowledge and behaviour to develop an apprentice to be able to select, inspect and wear breathing apparatus.

The specification is the minimum core standard of these requirements but does not preclude employers from using their relevant company specific procedures and documentation to enhance the skills and knowledge of the learner. Any such enhancements should be documented in the respective company / learning provider training programme.

What do I need to take this module?

Candidates to be **assessed** as competent in this area must have successfully completed the criteria shown in the unit.

No other evidence will be accepted as an equivalent level of achievement for this unit.
There are no pre-requisites of taking this unit.

Performance Criteria

To achieve this unit you will need to be able to:

- P1. Visually inspect the mask, any inhalation or exhalation valves / vents, the visor and seals for any signs of damage or defects
- P2. Visually inspect the hoses for signs of defects or damage
- P3. Ensure all seals are in place and of a serviceable condition
- P4. Check the belt to ensure it is in good condition
- P5. Where applicable install the strainer and or air turbine in a suitable location where the air is of a respirable quality
- P6. Where an assisted air system is used confirm there is a power supply to the unit and the turbine operates correctly
- P7. Where applicable connects the strainer or air turbine to the end of the hose and carry out the necessary leakage tests
- P8. Ensure the mask and belt are correctly connected to the hoses and that the breathing apparatus is adjusted to fit the user
- P9. Where applicable ensure that a flame retardant balaclava is worn
- P10. Fit and adjust the face mask and successfully complete a face fit test - in line with manufacturers' instruction and company policy and procedures
- P11. Safely operate the breathing apparatus in line with manufacturers' instruction and company policy and procedures
- P12. On completion of work, remove the breathing apparatus, in a respirable atmosphere, check, clean and return for storage

Knowledge and Understanding

To achieve this unit, you will need to know and understand:

- K1. When breathing apparatus must be deployed on site, at which atmospheric gas levels and in which situations
- K2. The number of breathing apparatus sets that must be deployed for a given situation
- K3. The actions to be taken where defects or damage are identified
- K4. The actions to be taken in the event of a failed face fit test or leakage test
- K5. When breathing apparatus must be checked by the wearer
- K6. What other PPE may be required when wearing breathing apparatus

Module IND18 Gas industry specific tools and equipment

This training specification has been developed as part of the gas team leader standard for both service layer and main layer. The specification details the required skills, knowledge and behaviour to develop an apprentice to recognise and operate the different types of safety specific tools and equipment used in the gas industry.

The specification is the minimum core standard of these requirements but does not preclude employers from using their relevant company specific procedures and documentation to enhance the skills and knowledge of the learner. Any such enhancements should be documented in the respective company / learning provider training programme.

What does this specification look like?

Gas network team leaders need to be able to recognise and operate the following:

GIST1 Gas Detection Instrumentation

GIST2 Volt Stick

GIST3 Bar Hole Tool

What do I need to take this module?

Candidates to be **assessed** as competent in this area must have successfully completed the criteria shown in the unit.

No other evidence will be accepted as an equivalent level of achievement for this unit.

There are no pre-requisites to undertaking this unit.

Performance Criteria

To achieve this unit you will need to be able to:

Gas Detection Instrumentation

- P1. Identify the different types of gas detection instrumentation including:
 - a) Portable gas detectors
 - b) Personal monitors
- P2. Operate gas detection instruments in line with company procedures and manufacturers' instructions including recertification of fault conditions i.e. water ingress
- P3. Recognise critical gas concentration levels and take action as appropriate

- P4. Carry out routine maintenance and calibration in line with company procedures and Manufacturers' instructions

Volt Stick

- P5. Identify the correct type of volt stick used in the gas industry - ATEX approved
P6. Demonstrate the daily checks to be completed on the volt stick
P7. Demonstrate the pre-use and post-use functionality checks to be carried out
P8. Demonstrate how to use the volt stick in a given situation, prior to commencing work activities

Bar Hole Tool

- P9. Demonstrate the pre-use checks required for a bar hole tool:
- Within its test date
 - Condition of the handle - clean and damage free
 - Condition of the bar - not bent, free from rust and other deposits, has ease of travel and the point is in a suitable condition
 - The locking screw is in position and not bent
- P10. Demonstrate the pre-use site checks:
- Cable and plant location
 - Marking out of the site
 - Visual inspection
 - Any anti-sparking measures required
 - Any other site specific safety measures required
- P11. Select the correct bar hole depth relative to the surface being penetrated
P12. Demonstrate the correct method of use of the bar hole tool and produce sample holes at specified intervals
P13. Using approved gas detection instrumentation demonstrate how to correctly sample the bar holes for the presence of gas
P14. Reinstate bar holes when site investigations are complete

Knowledge and Understanding

To achieve this unit, you will need to know and understand:

Gas detection instrumentation

- K1. The limitations of use of gas detection instruments including:
- Portable gas detectors
 - Personal monitors
- K2. The pre-use checks to be made prior to using gas detection instrumentation

- K3. The operation of the gas detection equipment and the start-up sequence
- K4. The reading ranges used including:
 - a) PPM (parts per million)
 - b) % LEL (lower explosive limit)
 - c) % volume
- K5. The relationship between % Volume - % LEL - PPM
- K6. Critical gas concentration levels and high and low alarm conditions including:
 - a) Natural gas
 - b) Carbon monoxide
 - c) Hydrogen sulphide
 - d) Oxygen
- K7. Interpretation of readings
- K8. The actions to be taken under alarm conditions or when critical gas concentration levels are encountered
- K9. Recognise the fault conditions that could be encountered when operating gas detection instruments
- K10. The action to be taken in the event of a fault occurring
- K11. The routine maintenance requirements of gas detection instruments including:
 - a) Calibration
 - b) Filters
 - c) Battery changing / charging

Volt Stick

- K12. When functionality checks must be completed on the volt stick
- K13. The action to be taken when a volt stick fails the functionality checks
 - a) Daily check
 - b) Pre and post use checks
 - c) Battery fault and exchange
- K14. Which surfaces must be checked using a volt stick prior to work commencing?
- K15. The actions to be taken when the bolt stick illuminates, indicating a fault condition

Bar Hole Tool

- K16. The checks to be completed prior to using a bar hole tool
- K17. The action to be taken where the tool does not meet the requirements of the pre-use checks
- K18. The limitation of use of the tools including:
 - a) Where the tool can be used
 - b) Alternative methods which could be employed
- K19. The maximum allowed depth of penetration in the carriageway and in the footway and how this is achieved

K20. The requirements for safe working in the highway

K21. The action to be taken in the event that the bar hole tool becomes stuck in the ground

K22. The action to be taken in the unlikely event that a cable or other utility plant is struck

K23. The PPE requirements when using a bar hole tool