Confined Space TRAINING





About Us		5
Our Training Team		5
Qualifications		6
Course Accreditations		
2		
Introduction To Confined Spaces		10
Importance Of Confined Space Safety		
Real Life Instances & Their Consequence	S	
Confined Space Training With ITS		11
-		
	be Breathing Apparatus & Self Rescue (1 Day)	
	Breathing Apparatus (2 Days)	
	onfined Space Consultancy	
	bw Risk Confined Spaces (1 Day)	
	edium Risk Confined Spaces (2 Days)	
	igh Risk Confined Spaces (3 Days)	
CABWI Level 3 Award Emergency F		
	nfined Spaces	
-	ng In Low Risk Confined Spaces 6160-01	
City & Guilds Level 2 Award Working	In Medium Risk Confined Spaces 6160-02	
City & Guilds Level 2 Award In Worki	ng In High Risk Confined Spaces 6160-03	
City & Guilds Level 2 Award In Entra	nt & Entry Controller	
For Confined Spaces (Medium Risk	:) 6160-09	
City & Guilds Level 3 Award In Contr	ol Entry & Arrangements	
For Confined Spaces (High Risk) 61	60-04	
City & Guilds Level 3 Award In Super	vising Teams Undertaking	
Work In Confined Spaces 6160-05.		
City & Guilds Level 3 Award In Direct	Emergency Rescue	
& Recovery Of Casualties From Cor	nfined Spaces 6160-07	
City & Guilds Level 3 Award In Worki	ng As A Member Of A Rescue	
& Recovery Team In Confined Spac	es 6160-08	
City & Guilds Level 4 Award In Plan, N	Manage & Review Legislative	
& Safety Compliance For Work In Co	onfined Spaces 6160-06	
Legal Requirements When Working In Confin	ed Spaces	
Recognising Confined Spaces		
Characteristics Of Confined Spaces:		
Types Of Confined Spaces & Their Hazards		
Hazardous Gases That May Be Present Ir	Confined Spaces	
Other Hazards In Confined Spaces		
Risk Assessment & Hazard Identification		40
Confined Space Entry Procedures		41
Confined Space Equipment		
Conclusion		
·		



- and the second

its

About Us

Industry Training Services was formed in 2000 by civil engineer Brendan Crealey. From humble beginnings in a business unit in Maghery Co. Tyrone the company has grown to what it is today, Ireland's Leading Health and Safety Training Provider serving sectors such as construction, utilities, manufacturing, telecommunications and more. ITS work closely with clients to develop bespoke health and safety training solutions which are tailored to their requirements. We offer a flexible approach to training, delivering courses at our training centre in Portadown, our Dublin HQ and in various other locations across Ireland, including at the clients' premises.

ITS offer a number of accreditations and courses to give clients the advantage of demonstrating their competence in health and safety from a trusted professional body.

Experience: Established in 2000, we have built up invaluable industry experience and extensive knowledge over the years. Our experienced trainers bring industry-specific expertise, enhancing the quality of our training sessions.

Knowledge: Our knowledgeable staff possess expertise in all our services, ensuring that our clients receive accurate and valuable information to support decision making.

Integrity: At the heart of our business lies a commitment to providing clients with expert advice on services, ultimately saving our clients valuable time and money. Moreover, we are dedicated to actively contributing to the reduction of fatalities and injuries in the industries we serve.

Reputation: We have earned our exceptional reputation through years of dedicated service, with many of our clients being with us since our inception. Likewise, a significant number of our staff have been working with us for many years.

Our Training Team

Our expert trainers boast extensive experience across various business sectors, guaranteeing the delivery of tailored and relevant training that addresses the specific needs of your business and site. They excel in preparing you to handle real-life scenarios and specific hazards effectively.

Qualifications

Level 3 Award in Learning and Development

All of our trainers hold a Level 3 Award in Learning and Development Training. This formally certifies individuals to a nationally accredited standard to ensure they have the ability to effectively teach others (in the post 16 education sector).

Assessor Awards

These awards are designed for anyone assessing and carrying out quality assurance in all occupational sectors including accredited learning and non-accredited learning qualifications.





Course Accreditations

As Ireland's ONLY accredited provider of mobile confined space training, we can offer City and Guilds or CABWI Confined Space Training for low, medium, and high-risk environments, depending on your chosen accrediting body.





its

City & Guilds

All trainers hold the relevant qualifications to deliver and assess a comprehensive suite of confined space training and assessments mapped against the National Occupational Standard (NOS) for confined spaces.

Alongside these qualifications our instructors have years of industry experience in confined space management, in several sectors such as: Fire and Rescue, the water industry and utilities.

CABWI

Our trainers can also deliver CABWI certified Confined Space training courses. CABWI is a nationally recognised awarding body, specialising in vocational qualifications for the water and wider utilities industries. They offer qualifications relating to water quality, and safety during street works and in confined spaces. However, CABWI certification is also open to participants who work within other industry sectors outside of water and utilities.

ITS Certified

Alternatively, our ITS certificates, if preferred, are in alignment with the industry accredited courses. ITS certifications are suited to personnel who do not require a specific industry accreditation. We can also develop confined space training courses tailored to the particular environment or circumstances your workers are faced with if you require something a bit more unique.

CPD points are available for all participants who require them with 1 hour of training equating to 1 CPD point.

Introduction to Confined Spaces

A confined space is any space that is large enough and configured in such a way that an employee can bodily enter and perform work, has limited or restricted means for entry or exit, and is not designed for continuous employee occupancy. Examples of confined spaces include tanks, vessels, silos, storage bins, hoppers, vaults, pits, manholes, tunnels, equipment housings, ductwork, pipelines, basements, and roof spaces.

Confined spaces can conceal a series of hazards that pose serious risks to those who enter them. These confined spaces may exist in a wide array of settings, from industrial facilities and construction sites to agricultural environments. Understanding and effectively managing these spaces is not only a legal obligation but a moral imperative to ensure the safety and well-being of individuals who encounter them.

They share common traits: limited access points and restricted means of egress. Such confinement can lead to the accumulation of hazardous atmospheres, the risk of engulfment, and entrapment, making these spaces inherently dangerous.

Importance of Confined Space Safety

The consequences of overlooking the hazards within confined spaces can be severe, leading to injuries, illnesses, and, tragically, loss of life. Recognising these dangers and developing the knowledge and strategies to mitigate them is paramount.

Real life instances and their consequences

Every year in the UK and Ireland, a significant number of individuals suffer fatal or severe injuries whilst working in confined spaces. Incidents have occurred in various sectors such as manufacturing, utilities, maritime, construction, offshore, and agriculture.

Confined Space Training with ITS

Industry Training Services (ITS) deliver a range of accredited confined space training courses suitable for workers who are exposed to low, medium, and high-risk environments.

> Training is delivered at our purpose-built training centre in Portadown, Co. Armagh, at our Dublin HQ, and using our Confined Spaces Mobile Training Unit which can be driven and set up in less than 30 minutes at the clients' premises/site, anywhere in Ireland. We can also deliver confined space courses at various other regional venues across Ireland to minimise travel time and costs for participants.

> ITS provide all necessary equipment such as breathing apparatus, gas monitors, and rescue equipment.

Our courses are designed to provide a realistic confined space experience. Both the training centre and mobile unit have vertical and horizontal entry points and over 30 metres of crawl space, in line with awarding body requirements. These varying entry points allow a range of different scenarios to be simulated. The mobile training unit has the added bonus of supporting companies to reduce their carbon footprint. As the unit can be brought to client premises, it reduces the need for participants to travel to a training venue, which saves time, money, and positively impacts the environment.

The training will cover topics such as:

- » The characteristics and hazards of confined spaces.
- » The equipment and protective gear to use when entering confined spaces.
- » The procedures for entering and exiting confined spaces safely.
- » The importance of air monitoring and testing before and during entry.
- » Emergency procedures for rescuing workers trapped or injured in a confined space.
- » The legal requirements for confined space entry and safety.

Creating awareness of the risks, participating in practical training, and regular refresher training can save lives.

Benefits of the Confined Space Mobile Training

Realistic Confined Space Experience

Trainees can practice in a controlled environment that mimics the challenges of actual confined spaces. This handson experience is invaluable for building confidence and competence amongst workers. The Confined Space Mobile Training Unit has facilities for both vertical and horizontal entry points with over 30m crawl space. These varying entry points allow a range of different scenarios to be simulated.





Mobile Unit

Training is delivered on clients' own site. Instead of sending your workforce off-site, the training unit comes directly to your location. This eliminates the need for expensive travel arrangements, accommodation, and minimises downtime. Employees can receive training without being away from the workplace for extended periods, resulting in substantial cost savings for your organisation.

Experience

ITS boasts over 23 years of invaluable industry experience and extensive knowledge. Our experienced trainers bring industryspecific expertise with years of experience in confined space management within the fire & rescue and water industries, enhancing the quality of our training sessions.



On-Site Training

Conducting training on-site allows your team to bond and learn together. It fosters collaboration and reinforces the importance of looking out for one another in confined spaces.

Rapid Set-Up

From arrival on site, the unit can be up and running in less than 30 minutes with all equipment provided by ITS including:

- Breathing apparatus
- Gas monitors
- Rescue equipment



Environmental Impact

By reducing the need for employees to travel for training the mobile unit can help companies to lower carbon footprint and adopt a greener approach to workplace safety.

CPD Points

CPD points available for participants – 1 hour = 1 CPD point

Confined Spaces, Safe Entry, Escape Breathing Apparatus & Self Rescue

Who Should Attend?

This 1 day course is predominantly intended for practical users who need to enter spaces which are substantially enclosed and where there is a potentially hazardous working environment.

Aim

This course is designed to ensure that delegates who need to enter such workplaces understand the requirements of the law, the need for risk assessments and safe systems of work and how to apply these practically. This includes competent use of the appropriate equipment, to enable entry to be made safely.

Objective

By the end of the course candidates will be aware of the following:

- What is a confined space and what are the hazards.
- Legal requirements.
- Risk assessments and safe systems of work.
- Equipment required to enter a confined space.
- The purpose and use of gas detection equipment.
- The purpose and use of escape breathing apparatus.
- The use of ropes and safety harnesses.
- The purpose and use of tripods and man riding winches.
- Personal protective equipment and hygiene.
- Examination, testing and maintenance of equipment.
- Ventilation and the avoidance of unsafe atmospheres.
- Communication and entry procedures.
- Practical exercise and assessments.
- Communication and entry procedures.

Training Methods

A proportion of hands-on demonstrations and practical exercises, supplemented with classroom-based tutorials.

References

- Health & Safety at Work Act/ Order.
- Management of Health and Safety at Work Regulations.
- Provision and Use of Work Equipment Regulations.
- Confined Spaces Regulations.
- Control of Substances Hazardous to Health.
- Personal Protective Equipment Regulations.
- The Safety, Health, and Welfare at Work (Confined Spaces) Regulations 2001 (Ireland).

Additional Information

This training would also benefit Managers, Supervisors, Engineers (who may need to control work). All delegates should be physically fit, as an entry exercise will be carried out.

Training Location

At ITS Portadown HQ, Dublin HQ or at the client's own site via our Mobile Confined Space Training Unit.

Confined Spaces, Safe Entry & Full Breathing Apparatus

Who Should Attend?

This Confined Spaces, Safe Entry course is more intense than the one-day course and is for delegates who spend a significant amount of time in substantially enclosed spaces and where there is a potentially hazardous working environment.

Aim

To identify safe working practices when working in confined spaces and ensure the safe entry of the confined space and the work is adequately supervised.

Objective

- By the end of the course candidates will be aware of the following:
- What is a confined space and what are the hazards.
- Legal Requirements.
- Risk Assessments and safe systems of work.
- The purpose and use of gas detection equipment.
- Equipment required to enter a confined space.
- The use of ropes and safety harness.
- The purpose and use of tripods and man riding winches.
- Personal protective equipment.
- The purpose and use of escape breathing apparatus.
- Examination, testing and maintenance of equipment.
- Ventilation and the avoidance of unsafe atmospheres.
- Communication and entry procedures.
- Practical exercise and assessments.
- Communication and entry procedures.

Training Methods

A proportion of hands-on demonstrations and practical exercises, supplemented with classroom-based tutorials.

References

- Health and Safety at Work Order/ Act.
- Confined Space Regulations.
- Codes of Practice.
- The Safety, Health, and Welfare at Work (Confined Spaces) Regulations 2001 (Ireland).

Additional Information

All Candidates attending the course must bring suitable clothing for working in wet conditions with a change of clothes for class room training. A certification of medical fitness is required for all candidates attending the course.

Training Location

At ITS Portadown HQ, Dublin HQ or at the client's own site via our Mobile Confined Space Training Unit.

Confined Spaces for Managers

Who Should Attend?

This manager course is intended for those who manage, plan and supervise confined space operations, including those personnel required to write a safe system of work plan for confined space operations. The candidate may be a team leader, supervisor or manager. The course does not involve a practical confined space entry exercise.

Aim

To understand and identify safe working practices when working in confined spaces, be aware of the relevant regulations and codes of practice and how to interpret them, be able to produce a safe system of work plan (Risk assessment/ method statement/rescue plan/permit system).

Objective

By the end of the course candidates will be aware of the following:

- What is a confined space and what are the hazards.
- Understanding/application of relevant legislation and codes of practice.
- Confined space classifications.
- Equipment used for confined space entry, gas monitors, rescue harnesses, tripod and winch, escape breathing apparatus, full breathing apparatus, airline sets.
- Producing risk assessments, method statements and permit systems for various risk levels.
- Rescue planning.
- Training requirements for operatives entering confined spaces.

Training Methods

- Classroom based tutorials.
- Inspection of a confined space and production of a safe system of work.
- Hands on demonstration of the various equipment types.

We often run this course at our premises and for our clients across Northern Ireland, the UK and Ireland at their premises or a suitable site of their choosing.

Training Location

At ITS Portadown HQ, Dublin HQ or at the client's own site via our Mobile Confined Space Training Unit.

Discounts available for group bookings | Contact us for a quote. For Mobile Unit Training (Note: maximum of 8 participants for practical training elements).

Confined Space Risk Assessment

Summary

At Industry Training Services, we understand the importance of ensuring the safety and compliance of your operations when it comes to confined spaces. Confined Space Risk Assessments are a practical way of ensuring that potential risks to your team are identified and appropriate procedures are put in place to minimise the potential of an incident occurring.

Our confined space risk assessment will include one or more site visits which are designed to comprehensively review and assess your confined spaces and provide you with the knowledge and insights required to maintain a safe and compliant work environment.

During these visits, one of our experienced confined space trainers will conduct a thorough assessment of your facilities, keeping the following objectives in mind:

- Definition, Naming, and Classification: We review and advise on the definition, naming, and classification of all potential confined spaces within your operations. This includes a meticulous assessment of how current statutory provisions and safe systems of work apply to each confined space.
- 2. Equipment Selection and Operation: We assess the selection, operation, and use of equipment related to confined spaces. Ensuring that equipment used meets safety standards and is properly maintained, is vital for maintaining a secure work environment.
- 3. Training Needs: Our team review and advise on the training requirements for your personnel, ensuring they are well-prepared and informed about specific hazards and procedures associated with confined spaces.
- 4. Report and Recommendations: After the site visit, we prepare a comprehensive report that outlines our findings and recommendations. This report will be a valuable guide for you to follow to take positive action to improve safety and compliance.

Information for the report will be gathered through meetings and discussions with relevant representatives from Operations/ Production, Maintenance and Safety Departments and various photographs will be taken as supporting evidence.

Our confined space risk assessments are tailored to your organisation's needs and may include documented guidance on some of the following topics:

- Dangerous Substances or ATEX Assessments.
- Fire Risk Assessments.
- Contents of COSHH File and relevant Safety Data
 Sheets.
- Occupational atmospheric monitoring reports.
- Copies of Confined Space or Hot permits.
- Details of current relevant Policies, Procedures and Risk Assessments, etc.

At Industry Training Services, our goal is to help you create a safer and more compliant working environment within your confined spaces. Our site visits, thorough risk assessments, and expert recommendations are essential in achieving this goal.

Contact us today to schedule a Confined Space Risk Assessment site visit and take the first step towards enhancing the safety and compliance of your confined space operations.



CABWI Level 2 Award working in Low Risk Confined Spaces

Qualification Summary

The CABWI Level 2 Award in Working in Low Risk Confined Spaces allows learners to demonstrate the skills and knowledge required by those who need to work in low risk confined spaces as part of their role.

Qualification Aim

The competence-based qualification covers the underpinning knowledge and practical skills required to work in low risk confined spaces. To achieve a full Level 2 Award in Working in Low Risk Confined Spaces, a learner must complete a single unit: Working in low risk confined spaces. The unit is assessed using a written knowledge assessment and a practical skills test, conducted in controlled circumstances.

Course Objectives

The course will cover:

- Risk assessment of confined space hazards.
- Types of gaseous atmospheres, portable gas monitoring equipment and their use.
- The use of harness, tripod, man riding winch/fall arrest and safety lines.
- Emergency preparedness and procedures.

Prerequisites

Delegates must be aged 16 or over and medically fit in line with current industry requirements.

Training Location

At ITS Portadown HQ, Dublin HQ or at the client's own site via our Mobile Confined Space Training Unit.



CABWI Level 2 Award Working in Medium Risk Confined Spaces

Qualification Summary

The CABWI Level 2 Award in Working in Medium Risk Confined Spaces allows learners to demonstrate the skills and knowledge required by those who need to work in medium risk confined spaces as part of their job role.

Qualification Aim

This competence – based qualification covers the underpinning knowledge and practical skills required to work in medium risk confined spaces.

This qualification may be taken by any learner aged 16 or over, although it is recognised that employers may have different age requirements for their employees who work in confined spaces. As the qualification involves practical assessment in a confined space environment, centres must ensure that any learner undertaking the qualification is medically fit, in line with the current industry requirements. For the water industry, these requirements can be found in the Water UK Occasional Guidance Note (OGN) – *The Classification and Management of Confined Space Entries*.

To achieve a full Level 2 Award in Working in Medium Risk Confined Spaces, a learner must complete a single unit: Working in medium risk confined spaces.

The unit is assessed using a written knowledge assessment and a practical skills test, conducted in controlled circumstances.

The qualification is valid for 3 years.

Course Objectives

The course will cover:

- Preparing to work safely.
- Entering and exiting the confined space.
- Preparing and using appropriate respiratory equipment.
- Using equipment and tools safely.
- Following procedures.
- Dealing with emergencies.
- Appropriate knowledge and behaviour.
- Relevant industry standards.

Prerequisites

Delegates must be aged 16 or over and medically fit in line with current industry requirements.

Training Location

At ITS Portadown HQ, Dublin HQ or at the client's own site via our Mobile Confined Space Training Unit.



CABWI Level 2 Award Working in High Risk Confined Spaces

Qualification Summary

The CABWI Level 2 Award in Working in High Risk Confined Spaces allows learners to demonstrate the skills and knowledge required by those who need to work in high risk confined spaces as part of their job role.

Qualification Aim

This competence – based qualification covers the underpinning knowledge and practical skills required to work in high risk confined spaces.

This qualification may be taken by any learner aged 16 or over, although it is recognised that employers may have different age requirements for their employees who work in confined spaces. As the qualification involves practical assessment in a confined space environment, centres must ensure that any learner undertaking the qualification is medically fit, in line with the current industry requirements. For the water industry, these requirements can be found in the Water UK Occasional Guidance Note (OGN) – *The Classification and Management of Confined Space Entries*.

Who Should Attend?

This course is designed for candidates that are involved in confined space entry with full duration breathing apparatus for high risk confined spaces as described in the national occupational standards for water & non water confined space entries.

Training Location

At ITS Portadown HQ, Dublin HQ or at the client's own site via our Mobile Confined Space Training Unit.

Course Objectives

The course will cover:

- Preparing to work safely.
- Entering and exiting the confined space.
- Preparing and using appropriate respiratory. equipment.
- Using equipment and tools safely.
- Following procedures.
- Dealing with emergencies.
- Appropriate knowledge and behaviour.
- Relevant industry standards.

The practical assessment must take place in a controlled confined space environment that meets the requirements set out in the qualification specification, and centres requiring recognition to deliver this qualification must show that they have the facilities and equipment required to carry out the practical assessments for a high risk confined space operation.

Prerequisites

Delegates must be aged 16 or over and medically fit in line with current industry requirements. Any learner wishing to undertake the Level 3 Award in Emergency Rescue and Recovery of Casualties from Confined Spaces MUST already have achieved the Level 2 Award in Working in High Risk Confined Spaces, and must hold a valid certificate.



CABWI Level 3 Award Emergency Rescue and Recovery of Casualties from Confined Spaces

Qualification Summary

The CABWI Level 3 Award in Emergency Rescue and Recovery of Casualties from Confined Spaces allows learners to demonstrate the skills and knowledge required by those whose job role requires them to act as part of a confined space rescue team.

Qualification Aim

The competence-based qualification covers the underpinning knowledge and practical skills required to act as a member of a confined space rescue team during a rescue operation.

Any learner wishing to undertake the Level 3 Award in Emergency Rescue and Recovery of Casualties from Confined Spaces MUST already have achieved the Level 2 Award in Working in High Risk Confined Spaces and must hold a valid certificate.

Training Location

At ITS Portadown HQ, Dublin HQ or at the client's own site via our Mobile Confined Space Training Unit.

Course Objectives

The course will cover:

- How to prepare to work safely in confined spaces under emergency conditions.
- Preparing to work safely in confined spaces under emergency conditions.
- Entering and exiting confined spaces safely.
- Preparation and use of respiratory equipment (RPE) in accordance with the manufacturers specifications.
- Use of rescue equipment in accordance with manufacturers instructions.
- Following procedures safely.
- Controlling risks during working.
- Dealing with emergencies.
- Recovery of casualties.
- Completion of handover procedures.

The practical assessment must take place in a controlled confined space environment that meets the requirements set out in the qualification specification, and centres requiring recognition to deliver this qualification must show that they have the facilities and equipment required to carry out the practical assessments for a high risk confined space operation.



City & Guilds Level 2 Award in Working in Low Risk Confined Spaces 6160-01

Who Should Attend?

Any worker who needs to work in low risk confined spaces as part of their role.

Aim

The aim of this unit is to reflect the national occupational standard for a low risk related confined space environment. This unit covers both water and non-water industry areas.

Objective

By the end of the course candidates will be assessed on their ability to:

- Prepare to Work Safely in Low Risk Confined Spaces.
- Enter and Exit Low Risk Confined Spaces Safely.
- Use Equipment and Tools Safely.
- Follow Working Procedures and Work Safely.
- Deal with Emergencies.
- Understand the principles of working in low risk confined spaces.
- Understand Standard Protocols for Working in Low Risk Confined Spaces.

Training Methods

Classroom based learning, practical demonstrations, and practical participation.

Assessment Methods

Practical observation, short answer question paper.

Training Location

At ITS Portadown HQ, Dublin HQ or at the client's own site via our Mobile Confined Space Training Unit.

Prerequisites

Delegates must be aged 16 or over and medically fit in line with current industry requirements.



City & Cuilds Level 2 Award Working in Medium Risk Confined Spaces 6160-02

Who Should Attend?

Any worker who needs to work in medium-risk confined spaces as part of their role.

Aim

This unit aims to meet the national standard for medium risk confined spaces, spanning water and non-water industries.

Objective

By the end of the course candidates will be assessed on their ability to:

- Prepare to Work Safely in Medium-Risk Confined Spaces.
- Enter and Exit Medium Risk Confined Spaces
 Safely.
- Use Equipment and Tools Safely.
- Follow Working Procedures and Work Safely.
- Deal with Emergencies.
- Understand the principles of working in Medium Risk Confined Spaces.
- Understand Standard Protocols for Working in Medium-Risk Confined Spaces.

Training Methods

Classroom based learning, practical demonstrations, and practical participation.

Assessment Methods

Practical observation, short answer question paper.

Training Location

At ITS Portadown HQ, Dublin HQ or at the client's own site via our Mobile Confined Space Training Unit.



City & Cuilds Level 2 Award in Working in High Risk Confined Spaces 6160-03

Who Should Attend?

Any worker who needs to work in High-risk confined spaces as part of their role.

Aim

This unit aligns with the national standard for high-risk confined spaces, spanning water and non-water industries.

Objective

By the end of the course candidates will be assessed on their ability to:

- Prepare to Work Safely in High-Risk Confined Spaces.
- Enter and Exit High-Risk Confined Spaces Safely.
- Use Equipment and Tools Safely.
- Follow Working Procedures and Work Safely.
- Deal with Emergencies.
- Understand the principles of working in low risk confined spaces.
- Understand Standard Protocols for Working in High-Risk Confined Spaces.

Training Methods

Classroom based learning, practical demonstrations, and practical participation.

Assessment Methods

Practical observation, short answer question paper.

Training Location

Confined Space training courses can be delivered at the following locations:

- ITS Training Centre, Portadown (Head Office): 7B
 Derryneskan Road Portadown Co Armagh BT62 1UH.
- ITS Dublin Office: Unit 17, Cherry Orchard Industrial Estate, Dublin, D10 VX93.
- Confined Spaces Mobile Training Unit at a venue chosen by the client (e.g., office carpark or worksite).



City & Cuilds Level 2 Award in Entrant and Entry Controller for Confined Spaces (Medium Risk) 6160-09

Who Should Attend?

The entry controller/top person who controls entry and arrangements for medium risk confined spaces and works within them.

Aim

This unit adheres to the national standard for managing entry and work arrangements in medium-risk confined spaces, encompassing both water and non-water industries.

Objective

By the end of the course candidates will be assessed on their ability to:

- Prepare to work safely at medium risk confined spaces.
- Enter and exit the medium risk confined space safely.
- Work safely and monitor the work team to ensure procedures are followed.
- Deal with emergency situations.
- Understand the principles of working in medium risk confined spaces.
- Understand standard protocols for work in medium risk confined spaces.
- Understand entry controller duties and responsibilities.
- Understand equipment checks and inspection required.

Training Methods

This training method combines hands-on learning with theoretical knowledge to provide a comprehensive learning experience.

Assessment Methods

Practical observation, short answer question paper.

Training Location

Confined Space training courses can be delivered at the following locations:

- ITS Training Centre, Portadown (Head Office): 7B
 Derryneskan Road Portadown Co Armagh BT62 1UH.
- ITS Dublin Office: Unit 17, Cherry Orchard Industrial Estate, Dublin, D10 VX93.
- Confined Spaces Mobile Training Unit at a venue chosen by the client (e.g., office carpark or worksite).

Guilds

City & Cuilds Level 3 Award in Control Entry and Arrangements for Confined Spaces (High Risk) 6160-04

Who Should Attend?

The entry controller/top person who controls entry and arrangements for high risk confined spaces without entering them.

Aim

This unit aligns with the national standard for overseeing entry and arrangements in confined spaces, spanning water and non-water industries.

Objective

By the end of the course candidates will be assessed on their ability to:

- Implement procedures for teams working in high risk confined spaces.
- Control safe entry and exit to the high risk confined space.
- Monitor the work team to ensure procedures are followed.
- Control emergency situations.
- Understand health and safety and environmental legislation.
- Understand standard protocols for work in high risk confined spaces.
- Understand entry controller duties and responsibilities.
- Understand equipment checks and testing required.

Training Methods

This training method combines hands-on learning with theoretical knowledge to provide a comprehensive learning experience.

Assessment Methods

Practical observation, short answer question paper.

Training Location

Confined Space training courses can be delivered at the following locations:

- ITS Training Centre, Portadown (Head Office): 7B Derryneskan Road Portadown Co Armagh BT62 1UH.
- ITS Dublin Office: Unit 17, Cherry Orchard Industrial Estate, Dublin, D10 VX93.
- Confined Spaces Mobile Training Unit at a venue chosen by the client (e.g., office carpark or worksite).



City & Cuilds Level 3 Award in Supervising Teams Undertaking Work in Confined Spaces 6160-05

Who Should Attend?

Any person who is supervising teams undertaking work in confined spaces.

Aim

This unit aims to align with the national standard for supervising entry and arrangements in confined spaces, encompassing both water and non-water industries.

Objective

By the end of the course candidates will be assessed on their ability to:

- Implement procedures for teams working in confined spaces.
- Supervise the control of safe entry and exit to the confined space.
- Supervise the work team to ensure procedures are followed.
- Control emergency situations.
- Understand health and safety and environmental legislation.
- Understand standard protocols for work in confined spaces.
- Understand supervisory duties and responsibilities.
- Understand equipment checks and testing required.

Training Methods

This approach combines hands-on learning with theoretical knowledge to provide a comprehensive learning experience.

Assessment Methods

Practical observation, short answer question paper.

Training Location

Confined Space training courses can be delivered at the following locations:

- ITS Training Centre, Portadown (Head Office): 7B
 Derryneskan Road Portadown Co Armagh BT62 1UH.
- ITS Dublin Office: Unit 17, Cherry Orchard Industrial Estate, Dublin, D10 VX93.
- Confined Spaces Mobile Training Unit at a venue chosen by the client (e.g., office carpark or worksite).

City <mark>& P</mark> Guilds

City & Guilds Level 3 Award in Direct Emergency Rescue and Recovery of Casualties from Confined Spaces 6160-07

Duration: 1Day

Who Should Attend?

Those who lead rescue teams in confined spaces, with roles like team leader, coordinator, entry controller, or supervisor. Their responsibilities include planning for emergencies, mobilising teams, overseeing rescue activities, reporting, and site security post-incidents.

Aim

This unit adheres to the national standard for overseeing emergency rescue and recovery of individuals from confined spaces in both water and non-water industries.

Objective

By the end of the course candidates will be assessed on their ability to:

- Plan and prepare emergency operations for a rescue team.
- Mobilise a rescue team and direct entry and exit to the confined space.
- Monitor a rescue team to ensure procedures are followed.
- Understand the principles of working as rescue team leader.
- Understand rescue team leader duties and responsibilities.

Training Methods

Presentations, classroom work, practical sessions and scenarios.

Assessment Methods

Practical observation, short answer question paper.

Training Location

Confined Space training courses can be delivered at the following locations:

- ITS Training Centre, Portadown (Head Office): 7B
 Derryneskan Road Portadown Co Armagh BT62 1UH.
- ITS Dublin Office: Unit 17, Cherry Orchard Industrial Estate, Dublin, D10 VX93.
- Confined Spaces Mobile Training Unit at a venue chosen by the client (e.g., office carpark or worksite).

Prerequisites

If supervising teams performing rescue and recovery, learners must also hold the 'Working as a Member of a Rescue and Recovery Team in Confined Spaces (6160-08)' qualification and 'Working in High Risk Confined Spaces (6160-03)' qualification.



City & Guilds Level 3 Award in Working as a Member of a Rescue and Recovery Team in Confined Spaces 6160-08

Who Should Attend?

Aim

This unit is for anyone who works as part of a rescue and recovery team in confined spaces.

Reflect the national occupational standard for working as a rescue and recovery team member in confined spaces.

Objective

By the end of the course candidates will be assessed on their ability to:

- Oversee safety checks of the entry and rescue teams prior to commencing work activities.
- Enter and exit confined spaces safely as part of a rescue and recovery team.
- Use equipment and tools safely.
- Follow procedures and work safely as a member of a rescue and recovery team.
- Understand the principles of working as part of a rescue and recovery team.
- Understand standard protocols for working in rescue and recovery teams.

Training Methods

Presentations, classroom work, practical sessions and scenarios.

Assessment Methods

Practical observation, short answer question paper.

Training Location

Confined Space training courses can be delivered at the following locations:

- ITS Training Centre, Portadown (Head Office): 7B
 Derryneskan Road Portadown Co Armagh BT62 1UH.
- ITS Dublin Office: Unit 17, Cherry Orchard Industrial Estate, Dublin, D10 VX93.
- Confined Spaces Mobile Training Unit at a venue chosen by the client (e.g., office carpark or worksite).



City & City & Cuilds Level 4 Award in Plan, **Guilds** Manage & Review Legislative & Safety Compliance for Work in Confined Spaces 6160-06

Who Should Attend?

Managers who are responsible for organising planning and managing work in confined spaces.

Aim

This unit aims to meet the national standard for planning, managing, and reviewing legal and safety compliance in confined space work, spanning both water and non-water industries.

Objective

By the end of the course candidates will be assessed on their ability to:

- Plan the management of work in confined spaces.
- Manage confined space teams.
- Record and review legislation relating to confined spaces.
- Develop, monitor and confirm procedures for working in confined spaces.
- Understand environmental, legislative and health and safety compliance.
- Understand organisational requirements for confined space working.
- Understand plant, tools and equipment for working in confined spaces.
- Understand emergency arrangements and rescue plans.

Training Methods

The course involves classroom instruction, classroom work, and post-course projects, with no practical training requirement.

Assessment Methods

Portfolio of evidence, short answer question paper.

Training Location

Confined Space training courses can be delivered at the following locations:

- ITS Training Centre, Portadown (Head Office): 7B
 Derryneskan Road Portadown Co Armagh BT62 1UH.
- ITS Dublin Office: Unit 17, Cherry Orchard Industrial Estate, Dublin, D10 VX93.
- Confined Spaces Mobile Training Unit at a venue chosen by the client (e.g., office carpark or worksite).



Legal Requirements when working in Confined Spaces

Working in confined spaces in the UK and Ireland is subject to specific legal requirements and regulations to ensure the safety of workers. They are:

- Confined Spaces Regulations 1999 (SI 1997/1713)
 AKA The Code of Practice for Working in Confined Spaces: This is the primary legislation governing work in confined spaces in Northern Ireland. It defines a confined space and outlines the duties of employers, employees, and others, including the need for risk assessments, safe systems of work, and emergency procedures.
- Health and Safety at Work (Northern Ireland)
 Order 1978: This overarching legislation places a duty on employers to ensure the health, safety, and welfare of their employees. The Confined Spaces Regulations 1999 operate under this act.
- 5. Management of Health and Safety at Work Regulations (Northern Ireland) 2000: These regulations require employers to assess the risks associated with work, including work in confined spaces, and to put in place measures to control these risks.

- 2. Personal Protective Equipment at Work Regulations (Northern Ireland) 1993: Personal protective equipment (PPE) is required for work in confined spaces, these regulations specify the obligations for selecting, providing, and maintaining PPE.
- 4. Control of Substances Hazardous to Health (COSHH) Regulations (Northern Ireland) 2003: If there are hazardous substances in confined spaces, these regulations require employers to assess and control the risks associated with exposure to these substances.
- 6. The Safety, Health, and Welfare at Work (Confined Spaces) Regulations 2001 (Ireland) AKA Code of Practice for Working in Confined Spaces: In Ireland, the Safety, Health, and Welfare at Work (Confined Spaces) Regulations 2001 govern work in confined spaces. These regulations are similar in principle to the UK's Confined Spaces Regulations 1997.

Key Requirements:

- Risk Assessment: Employers must conduct a thorough risk assessment before any work in a confined space begins, identifying potential hazards and determining control measures.
- Safe Systems of Work: Employers are required to
 establish safe systems of work for confined space entry,
 which may include permits, training, and procedures.
- Emergency Planning: Adequate emergency
 procedures, including rescue plans and equipment, must
 be in place.
- Competency: Workers must be competent to carry out confined space work, which includes training and, if necessary, certification.

- Gas Monitoring: Continuous monitoring of atmospheric conditions is essential. If hazardous gases are present, the space may require ventilation.
- Personal Protective Equipment (PPE): Appropriate PPE, such as harnesses and lifelines, must be provided and used.
- Training: Employers must provide training to all
 employees involved in confined space work.
- Record Keeping: Detailed records of risk assessments, training, and any incidents must be maintained.
- Notifiable Work: Certain confined space work may require notification to relevant authorities.



It's crucial for employers and workers involved in confined space work to be aware of these regulations and comply with them fully. Non-compliance can result in serious legal consequences and, more importantly, can jeopardise the safety of workers. Specific guidance and additional regulations may apply to particular industries or situations, so it's advisable to consult with relevant regulatory bodies and seek professional advice when necessary to ensure full compliance.

for Worned Space

11SE

for Working in Confined Spaces

Safe work in confined spaces

Recognising Confined Spaces

9.1 Characteristics of Confined Spaces:

Limited Entry and Exit

Confined spaces have restricted entry and exit points. These openings may be small or narrow, making it challenging to enter and exit easily.

2

1

Not Designed for Continuous Occupancy

Confined spaces are not intended for prolonged human occupancy. They are usually designed for other purposes such as storage, maintenance, or access to equipment.



Enclosed or Partially Enclosed

Confined spaces can be fully enclosed (like tanks or vaults) or partially enclosed (like trenches or pits). The degree of enclosure can vary.



5

Difficult Access and Egress

Workers may have to use ladders, crawl through small openings, or navigate other challenging means to enter and exit confined spaces.

Limited Natural Ventilation

Confined spaces often have poor natural ventilation, which can contribute to the accumulation of hazardous gases or lack of oxygen.



7

Physical Hazards

Confined spaces can pose physical hazards like engulfment (submersion or entrapment in a liquid or granular material), entrapment by machinery or equipment, or the presence of moving parts.

Hazardous Atmospheres

They may contain or potentially develop hazardous atmospheres, such as low oxygen levels, toxic gases, or flammable vapours. These atmospheric hazards can make confined spaces particularly dangerous.



Mobile Training Simulato

Industry Training Services.com



Types of Confined Spaces and their Hazards

Confined spaces come in various types, each presenting unique challenges and potential hazards. Some common types of confined spaces include:

Tanks

Large containers used for storing liquids or gases, such as water tanks, fuel tanks, or chemical storage tanks. They often have limited access points and can contain hazardous atmospheres or residual materials.

Silos

Tall, vertical containers used for storing bulk materials like grain, cement, or powdered chemicals. Silos can have narrow access points and pose engulfment hazards if workers enter without proper precautions.

Manholes

Access points to underground utility or sewer systems. Manholes can be small and cramped, with limited ventilation and potential for hazardous gases.

Tunnels

Underground passages that may be used for transportation, utility infrastructure, or construction. Tunnels often have limited egress options and can accumulate hazardous gases.

Crawl Spaces

Low-ceilinged, narrow areas found beneath buildings or within walls. Crawl spaces can be difficult to access and may contain electrical hazards, pests, or mould.

Pits

Sunken areas often found in industrial settings, such as sump pits or inspection pits. Pits can accumulate liquids or gases and may have confined access points.

Vessels

Enclosed containers, such as boilers, pressure vessels, or reactors, used in industrial processes. Vessels can contain high-pressure or hightemperature hazards.

Ducts and Pipelines

Narrow channels used for the distribution of air, gases, or liquids. Ducts and pipelines can be challenging to access and may have hazardous contents or limited oxygen.

Trenches

Long, narrow excavations made for various purposes, such as construction or utility installation. Trenches can collapse, posing entrapment hazards.

Barges & Ship Compartments

Enclosed areas within ships and barges, including cargo holds, engine rooms, and tanks. These spaces may have limited access and potentially hazardous atmospheres.

Utility Vaults

Underground chambers that house utilities like electrical equipment or transformers. These spaces can contain electrical hazards and may lack ventilation.

Confined Spaces in Construction

Temporary confined spaces created during construction activities, like excavations, pits, or trenches. These spaces often require continuous monitoring.

Storage Bins

Containers used for storing materials in manufacturing or agricultural settings. These bins can accumulate dust or hazardous gases.

Sewers

Underground conduits for wastewater. Sewers may contain hazardous gases, moving water, or toxic substances.

Basements & Cellars

Those with low headroom form confined spaces. Basements are characterised by having half of their height below curb level. Cellars have more than half of their height below curb level.

Roof Space

Such spaces may have a lack of oxygen, excessive heat, and occupants may be subject to hazardous materials such as asbestos. Entry may require use of a ladder and risk of falls from height are prevalent.



It's essential to recognise that confined spaces can vary greatly in size, shape, and the hazards they present. Regardless of the type of confined space, a thorough risk assessment is necessary to identify potential dangers and implement appropriate safety measures before any work is conducted within these spaces. Additionally, understanding the specific hazards associated with each type of confined space is crucial for ensuring the safety of workers.

Hazardous Gases that may be present in Confined Spaces

Hydrogen Sulfide (H2S):

A colourless, highly toxic gas with a distinct "rotten egg" odour. It's commonly found in sewers, manholes, and areas with decaying organic matter.

Benzene

A volatile organic compound (VOC) that is colourless and flammable. It's used in various industrial processes and can be present in storage tanks or containers.

Methane (CH4)

A flammable and potentially explosive gas that is odourless and colourless. It can be produced in confined spaces like sewage treatment plants or natural gas facilities.

Toluene

Another VOC that is often used as a solvent in paints, coatings, and chemicals. It can be found in storage tanks or confined spaces in manufacturing facilities.

Carbon Monoxide (CO)

A colourless, odourless gas produced during incomplete combustion. It can accumulate in spaces with fuel-burning equipment, such as engine rooms or boiler rooms.

Nitrogen Dioxide (NO2)

A reddish-brown gas produced by combustion processes. It can be present in spaces with fuel-burning equipment, like engine rooms or furnaces.

Ammonia (NH3)

A colourless gas with a pungent odour. It's often found in refrigeration systems, chemical manufacturing, or agricultural settings.

Sulfur Dioxide (SO2)

A colourless gas with a pungent odour. It's commonly found in industrial settings, particularly where sulfur-containing fuels are burned.

Chlorine (Cl2)

A greenish-yellow gas with a strong, pungent odour. It's used in water treatment facilities and can be present in storage tanks or pipelines.

Volatile Organic Compounds (VOCs)

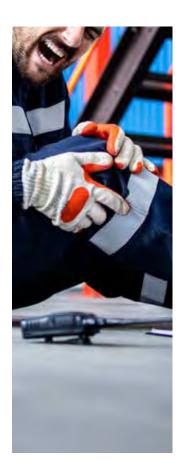
This category includes a wide range of organic chemicals, such as toluene, xylene, and acetone, which can evaporate into the air and pose health risks in confined spaces.

Carbon Dioxide (CO2)

A colourless, odourless gas that can accumulate in spaces with poor ventilation, such as silos, tanks, or fermentation vessels.

These are some of the specific gases that can be encountered in confined spaces. The presence of these gases can vary based on the type of confined space and its specific conditions, so it's crucial to conduct thorough atmospheric testing to identify potential hazards before entry and during work within confined spaces.

Other Hazards in Confined Spaces







Falls

Confined spaces often have limited access points and may require workers to use ladders, platforms, or other means to enter and exit. Falls from these heights can result in injuries.

Heat and Cold Stress

Poor ventilation in confined spaces can lead to extreme temperatures. Workers may be exposed to heat stress, dehydration, and heat-related illnesses, or conversely, cold stress and hypothermia in colder conditions.

Noise and Vibration

Some confined spaces contain equipment or processes that generate excessive noise or vibrations, potentially causing hearing damage or other health issues.

Limited Visibility

Confined spaces are often dark or poorly lit, making it challenging for workers to see potential hazards or move safely within the space.



Biological Hazards

In sewage systems or wastewater treatment plants, workers may encounter biological hazards such as bacteria, viruses, or harmful microorganisms that can cause infections or diseases.

Conducting a risk assessment and hazard identification in confined spaces is crucial to ensuring the safety of workers who will be entering these potentially dangerous environments.

Risk Assesment & Hazard Identification

1. Define the Scope

Clearly define the scope of the confined space entry and the objectives of the risk assessment. Know the specific confined space you're assessing and the work that will be performed inside it.

2. Assemble a Team

Form a team that includes individuals with expertise in confined space safety, including safety professionals, supervisors, and workers who will enter the confined space. Collaboration will ensure a comprehensive assessment.

3. Identify the Confined Space

Identify and clearly define the confined space you are assessing. Understand its physical characteristics, including size, shape, access points, and any potential hazards specific to that space.

4. Hazard Identification

List all potential hazards associated with the confined space. Hazards can include atmospheric hazards (e.g., low oxygen, toxic gases), physical hazards (e.g., moving machinery, confined space design), chemical hazards (e.g., presence of hazardous substances), and biological hazards (e.g., bacteria, fungi).

5. Assess the Risks

For each identified hazard, assess the level of risk it poses by evaluating:

- Likelihood: How likely is it that this hazard will cause harm?
- Consequence: What are the potential consequences if the hazard were to cause harm?

6. Determine Risk Levels:

Combine the likelihood and consequence assessments to determine the overall risk level for each hazard. You can use a risk matrix or a scoring system to prioritise hazards based on their risk levels.

7. Control Measures

Develop control measures to mitigate or eliminate identified hazards. Control measures can include:

- Engineering controls (e.g., ventilation, machine guarding).
- Administrative controls (e.g., safe work procedures, permits).
- Personal protective equipment (PPE).

Remember, the goal of a risk assessment in confined spaces is to protect the health and safety of workers by systematically identifying and reducing risks associated with the unique characteristics of these spaces.

8. Monitor and Review:

Establish procedures to monitor and review the effectiveness of control measures. Regularly assess whether the risk levels have been reduced to an acceptable level and adjust if necessary.

9. Record and Document

Document the entire risk assessment process, including hazard identification, risk assessment, control measures, and monitoring activities. Keep records for compliance and legal purposes.

10. Communicate and Train

Ensure that all relevant personnel are informed about the risk assessment findings, control measures, and the safe work procedures. Train workers on confined space safety and emergency response.

11. Review Periodically

Regularly review and update the risk assessment, especially if conditions within the confined space change or if new hazards are identified.

12. Emergency Response Plan

Develop an emergency response plan specific to the confined space, outlining procedures for rescue and communication in case of an emergency.

13. Test the Atmosphere

Before entry and continuously during work, test the confined space's atmosphere for oxygen levels, toxic gases, and flammability.

Confined Space Entry Procedures

Pre-entry preparations are critical for ensuring the safety of workers who will enter confined spaces. These preparations involve a series of steps and procedures to minimise risks and ensure that all necessary safety measures are in place before anyone enters a confined space.



- 1. Preparation: Identify the confined space, assess risks, and create a confined space entry plan. Obtain necessary permits and assemble a trained entry team.
- 2. Equipment and PPE: Check and ensure the availability and condition of personal protective equipment (PPE) and confined space equipment.
- 3. Atmospheric Testing: Test and monitor the confined space atmosphere for oxygen levels, flammable gases, and toxic substances.
- 4. Ventilation: Properly ventilate the space to maintain safe atmospheric conditions.
- 5. Communication: Establish a reliable communication system between entrants and attendants.
- 6. Entry and Exit: Define clear entry and exit procedures, including safe access methods.
- 7. Continuous Monitoring: Continuously monitor atmospheric conditions and worker status during the entry.
- 8. Attendant Duties: Entrants outside the space should maintain contact, keep unauthorised personnel away, and be trained in emergency response.
- 9. Work Activities: Perform work per established procedures and be prepared for emergencies.
- 10. Emergency Response: Develop rescue and evacuation plans with readily available equipment and personnel.
- 11. Post-Entry: After the work, conduct a post-entry evaluation, leave the space safe, and document the entry process comprehensively.

Confined Space Equipment

Personal Protective Equipment (PPE) for confined spaces is essential to ensure the safety of workers when entering and working in these potentially hazardous environments. The specific PPE required can vary depending on the hazards present in the confined space, however general PPE includes:

1. Respiratory Protection	6. Hearing Protection
Depending on the atmospheric conditions within the confined space, workers may need:	Earplugs or Earmuffs: Worn in confined spaces wit loud noise levels.
Air-Purifying Respirators: Used when there are airborne contaminants but sufficient oxygen levels.	
 Self-Contained Breathing Apparatus (SCBA): Necessary in spaces with low oxygen levels or unknown atmospheres. 	
 Protective Clothing Coveralls or Overalls: To protect against dust, dirt, and potential chemical splashes. 	 7. Communication Equipment Radios: To maintain contact between workers inside and outside the confined space.
Chemical-Resistant Suits: Required when handling or being exposed to hazardous chemicals.	
 Head Protection Hard Hats: Mandatory in areas where objects may fall, or head injuries are possible. 	 8. Gas Detection Equipment Gas Monitors and Detectors: To continuously monitor and alert workers to hazardous atmospheric conditions.
4. Hand Protection	9. Rescue Equipment
Gloves: Depending on the hazards, workers may need different types, such as:	Rescue Harnesses and Retrieval Systems: Essential for confined space rescue operations.
Chemical-resistant gloves.	
Cut-resistant gloves.	
Heat-resistant gloves.	
Insulated gloves.	
Electrically-insulated gloves.	
5. Foot ProtectionSafety Boots or Shoes: Featuring steel or composite	10. LightingIntrinsically Safe Lighting: For adequate visibility in

- toe caps and slip-resistant soles for foot protection.
- poorly lit spaces.

Conclusion

Insights into the critical aspects of confined spaces, their inherent hazards, and essential measures required to ensure safety while working within these environments have been explored.

As well as underlining the legal regulations and best practices governing confined space operations in the UK and Ireland, highlighting the importance of compliance and vigilance.

Whether you're working in the pharmaceutical sector, harbours, local authorities, or other industries, the principles of confined space safety remain universal. Our aim has been to provide you with valuable insights and knowledge that empower you to protect lives, uphold regulatory compliance, and foster a culture of safety within your organisation.

Remember, safety is not just a legal obligation but a moral one. It's a commitment to the well-being of your workforce, an investment in the sustainability of your business, and a testament to your dedication to preventing accidents.



PORTADOWN HQ

7 Derryneskan Road Portadown Co. Armagh BT62 1UH T: 02838 398700

DUBLIN HQ

Unit 17 Cherry Orchard Industrial Estate Dublin 10 D10 VX93 T: 01 891 6105