Safety Statement

In accordance with the requirements of

SAFETY HEALTH AND WELFARE AT WORK ACT 2005

Incorporating:

Safety, Health and Welfare at work (General Application) (Amendment) Regulations 2016 (S.I No. 70 of 2016)

Release and Amendment History

Section	Release/Amendment Summary	Issue	Date
All Sections	Initial Release of Policy	01	2005
All Sections	General Review and Signoff	02	17/10/18
All Sections	General Review and Signoff	03	24/10/19
All Sections / 9.6 Pandemic Health Risk	Re-formatting of Document and Sign off	04	26/05/20
All Sections	General Review and Update	05	14/01/21
All Sections Part 13	General review of document and clarification relating to emergency response drills	06	25/01/22
All Sections	General Review and Update	07	11/01/23

The approval of this documented information is indicated by its release on the Oasis document management system.

Contents

Introduction

The fundamental aim of the Safety, Health and Welfare at Work Act, 2005 is the prevention of accidents and ill health at the place of work.

These regulations shall come into operation from 1st January 2013. These regulations amend the Safety, Health and Welfare at work (General Application) Regulations 2007 (S.I. No. 299 of 2007) as previously amended by the Safety, Health and Welfare at work (General Application) (Amendment) Regulations 2007 (S.I No. 732 of 2007) and the Safety, Health and Welfare at Work (General Application) (Amendment) Regulations 2010 (S.I No. 176 of 2010) by inserting a new Part 10 and Schedule 12 to the Regulations relating to pressure systems.

The new Part 10 and Schedule 12 set out the requirements for the design, construction, safe operation, examination and testing of pressure equipment. They also provide for the maintaining of records of tests and examinations of such equipment. These provisions apply to all workplaces, in all industry sectors, that utilise pressure systems as part of their operations. These regulations revoke and replace 7 individual sets of Regulations-

a) Factories (preparation of steam boilers for examination) Regulations 1656 (S.I No. 174 of 1956),
b) Factories (report of examination of steam boiler) Regulations 1956 (S.I No. 183 of 1956),
c) Factories (report of examination of steam receivers) Regulations 1956 (S.I No. 184 of 1956),
d) Factories (report of examination of air receivers) Regulations 1956 (S.I No. 185 of 1956),
e) Factories (report of examination of air receivers) (Amendment) Regulations 1978 (S.I No. 357 of 1978)
f) Factories (report of examination of steam receivers) (Amendment) Regulations 1978 (S.I No. 358 of 1978), and
g) Factories (report of examination of steam boiler) (Amendment) Regulations 1978 (S.I No. 359 of 1978).

The Act, which applies to all employers, employees and the self-employed, set out general 'duties of care' for each of these parties. Employers are required to identify the hazards and assess the risks in the place of work, and to draw up a written Safety Statement setting out the arrangements in place to safeguard safety and health, along with the co-operation required from employees to achieve this.

Designers, manufacturers, suppliers and importers of articles and substances for use at work and those who design or construct place of work also have general duties under the Act.

The Act provides for consultation between employers and employees to help ensure co- operation in the prevention of accidents and ill health. This is one of the key provisions of the Act and a central part of the new system of promoting safety and health at work.

Health Safety and Welfare Statement

The health safety and welfare of our employees and others affected by our operations are the primary objectives of Xylem Water Solutions UK Ltd. Our goal is to prevent injuries and ill health in relation to the work we undertake and commit to fulfil the legal requirements relating to these activities.

Our behaviours both positive and negative have a profound effect on our overall performance, it is our intention to promote positive safety behaviour whilst learning from negative events and communicating the corrective actions to continually improve our ESH performance and management systems.

The following aims underpin our belief in Accept Only Zero and are clearly set out in this policy:

Management system and performance

We will implement robust management systems which will have appropriate resources, effective structures and governance. These systems will be set standards to monitor the health and safety performance of our organisation. Through effective analysis we will feed back our findings to the business and influence decision making at all levels.

Elimination of hazards for a safe and healthy workplace

We commit to eliminate hazards within work place through risk assessment and we will prioritise, plan and complete any corrective actions required to reduce risk to an acceptable level We will ensure everyone is provided with the information, training and knowledge to be able to carry out effective risk assessments. This will ensure that the working environment is safe both before work begins and during the activity for our Employees and anybody who could be affected by these operations.

Consultation & participation on health and safety matters

We commit to consult with our workforce and encourage participation in safety matters. A safety forum including workforce representatives will periodically meet and discuss safety matters. We will work collaboratively with our stakeholders and supply chain partners, sharing innovative ideas and approaches that will benefit all parties in achieving our shared vision of Accept Only Zero.

Visible leadership

Our management and supervisory team will lead by example and promote safety & health throughout the organisation with positive reinforcement of safe behaviours, challenging unsafe acts and conditions. Interactive dialogue with all employees will be both open and responsive to address any concerns or issues raised.

Keeping everyone healthy and safe

We will create a culture where everyone is encouraged and engaged to immediately challenge unsafe situations, conditions or behaviours, or those that can cause harm to health. Where our people identify unsafe events, they will be able to intervene free from reprisal to assist with making things safe, report and where required request resources to resolve any potential harm. We will provide training and instructions to ensure our people are competent and are able to understand the health and safety risks within their working environment.

Signed: Ian L Thompson

Ian Thompson
VP and Managing Director, UK and Ireland

Part 1 – H&S Policy and Responsibilities

1.1 Safety Policy

The approach to ensuring safe and healthy work conditions at Xylem Water Solutions Ireland is structured through the Safety Committee and may be summarised by the following headings: -

- Identification of hazards
- Engineering Hazards Out
- Provision of Safety Training and Instruction Provision of Protective Equipment
- Creation of Practical and Safe Working Systems Consultation with staff on Safety and Health matters

1.2 ESH Policy Xylem

The following is a comprehensive list of Xylem's policy numbers, explanations, forms reports etc., all contained within a separate policy manual.

1.0 Introduction
2.0 General Environment
3.0 Air Emissions
4.0 Solid and Hazardous Waste
5.0 Water Resource
6.0 Above or Below Ground Tank Management
7.0 Community Noise
8.0 Asbestos
9.0 General Health & Safety
10.0 Equipment, Machine and General in Plant Safety
11.0 Material Handling and General in Plant Safety
12.0 Fire Safety
13.0 Transport of Dangerous Goods
14.0 Industrial Hygiene
15.0 Chemical Management
16.0 Construction Work Site Safety
17.0 EHS Training

1.3 Instructions and Training

Xylem Water Solutions Ireland recognises that even with the best engineered work arrangements people may still need clearly defined safety procedures and instructions. For that reason there is a substantial commitment by Xylem Water Solutions Ireland to identifying safety-training needs, to carrying out that training and to measuring the competence of trainees. Strong emphasis will be placed on safety and health aspects during all training exercises.

Xylem Water Solutions Ireland expects that all employees will co-operate in the training exercises provided. Certain tasks in our operations require that strict safety procedures be followed. Where this arises, the employees involved receive special instructions. It is essential that no person attempt a potentially hazardous task without instruction.
The person(s) responsible for training and instruction shall identify the training needs and report on the options available to carry out the training. He/she shall present the options to the Director & General Manager for decision.

All new employees will receive a copy of the company's ESH induction card which summarizes and offers an overview all ESH relates issues, this document is available in **APPENDIX A** of this Document.

1.4 Consultation / Safety Committee

Xylem Water Solutions Ireland is committed to meeting its obligations of the Safety Health & Welfare at work Act 2005 on consultation. The following consultation arrangements have been agreed:

Safety Committee

Representative	Area Represented
Michelle Shortt	ESH Administrator
Martin Sole	ESHQ Manager
Duncan Astin	Factory/External Premises
Noel Dempsey	Field Workforce
Alison O'Reilly	Office / Rental
Richard Swinburne	Operations
Dean Brennan	Field Service Engineers

This committee will meet at intervals of approximately 3 months to discuss and review health and safety aspects of our operations. The effectiveness of the consultation arrangements will be reviewed from time to time. Xylem Water Solutions Ireland recognises the statutory rights of a safety representative as set out in the Act and is committed to co- operating with the person selected.

Any instruction or regulation issued by the firm's safety officer or by a person to whom responsibility has been delegated in writing must be observed. Failure to do so or to co- operate with them will be a valid reason for dismissal.

1.5 Consultation Arrangement

Persons responsible are:-

Name	Job Title
Ian Thompson	Managing Director UK&I
Richard Swinburne	General Manager
Martin Sole	ESHQ Manager

The persons responsible shall see that reports and agendas are provided to ensure efficient operation of the consultation arrangements.

1.6 Vaccinations

Xylem Water Solutions Ireland Ltd supply pumps for sewage systems. It is recognised that a proportion of people who come into contact with untreated sewage on a regular basis will develop Hepatitis A even when taking stringent physical precautions with protective work wear.

In light of this our company recommends personnel to be vaccinated against Hepatitis A, Tetanus, Polio & Typhoid.

The company also provides the annual "Flu jab" to those wishing to avail of it.

Pre-Employment Medicals
Any individual under consideration for employment will be required to undergo a Medical prior to an offer of employment being made. The medical will be conducted by a Doctor retained by the company for that purpose.

Periodic Medical Examinations-Engineering Personnel
Medical surveillance on a tri-annual basis will take place in respect of all individuals who are required to work, as part of their normal duties, in Confined Space.

All forklift drivers shall also be subject to further medical examinations every five years; however if these persons are also confined space trained the frequency shall be every three years.

1.7 National Rules and Regulations

It is the policy of Xylem Water Solutions Ireland to maintain a current register of all government publications relating to environmental, health and safety issues, i.e. New legislation, policy, reviews etc.

This register to be updated when necessary, so as to provide a current reference at all times.

All publications relevant to Xylem Water Solutions Ireland and contained in this register, to be secured in a separate ESH Government Publications file. The register also to contain Xylem EHS policy reviews and directives.

A review of government publications to occur on a regular basis. The main procedure for this is the request from the government publications office for latest listings and IBEC's (employers' union) circulars. However, Internet access to government and HAS sites would be considered the best forms of obtaining current information.

All personnel to be made aware of the register and any amendments or additions which occur. A copy of the register to be contained in the Company's Safety Statement. Where necessary, any issues arising from a new or revised publication, directly affecting Xylem Water Solution Ireland, its employees, customer's, suppliers' etc. will be entered into the Safety Statement

Part 2 – Safe Plant and Equipment

Each item of plant at Xylem Water Solutions Ireland is subject to regular inspection and safeguards are provided where appropriate. The inspections include confirmation of safe operation of plant and electrical equipment

2.1 Safe System of Work

It is the policy of Xylem Water Solutions Ireland to ensure that tasks are within the competence and capacity of the employee. The systems of work will be designed with that purpose in mind. It is clear that some duties necessarily give rise to risks, which can only be controlled by adherence to proper procedures. The training provided to workers will identify the areas where care and skill must be exercised.

It is the policy of Xylem Water Solutions Ireland. when purchasing new equipment, altering existing equipment or changing a system of work, to study such proposed purchases or changes to ensure so far as is reasonably practicable, that they are without significant hazard.

Systems of work include all normal (production) work, maintenance work and work by ourselves and contractors on site. They include consideration for the safety and health of visitors/customers. The persons responsible shall review systems of work on request from the safety co-ordinator and shall report their findings to him/her.

2.2 Review of new / revised projects

It is the policy of Xylem Water Solutions Ireland, to ensure that any new or changed work practices, tasks, projects or procedures are reviewed automatically to secure the safety of its personnel and any third-party member which may also be associated with the project.

A written procedure to be contained in the Company's Safety Statement for all new or changed projects. This to include, training requirements, health and safety awareness etc.

The review to occur automatically when the new or changed project is planned and also once it is in place.

All new or changed projects having passed this review period will then form part of the annual ESH internal audit and self-assessment programme.

Part 3 – Protective Equipment & Policy

Through experience and on the advice of competent health and safety specialists Xylem Water Solutions Ireland has developed a policy on the use of personal protective equipment. This policy is obligatory on all personnel at the Company's premises and sites including management, staff and visitors. The company intends to regularly review this policy and to up- date it as required. The review will consider the experiences to date, changes in work arrangements and the use of new chemical substances and processes.

It is the policy of Xylem Water Solutions Ireland to provide the required protective equipment to all direct employees and to replace it on presentation of the worn or defective item. It is provided to visitors on a loan basis at the discretion of the management.

The person responsible shall identify the appropriate protective equipment for tasks, which cannot be made safe by any other practicable means. He/she shall present the options available to Director & General Manager for decision

PRESENT PROTECTIVE EQUIPMENT POLICY

ITEM TO BE USED IN	
Protective Boots	Workshop, Stores, Factory, Site.
Ear Defenders	Site, Workshop where necessary.
Safety Glasses	Workshop, Site.
Protective Clothing	Workshop, Stores, Factory, Site.

It is the responsibility of all users and owners of PPE to store, in their own care, that equipment or items of clothing in a safe and uncontaminated location, and that it be maintained for proper use by them or others when required.

Part 4 – Safety Guidance

This part of the manual contains brief notes on particular hazards likely to be encountered on site and suggestions for simple precautions that should be taken.

The list is by no means exhaustive and all employees are invited to put forward suggestions for additions to the Safety Co-ordinator.

Personal safety on site requires a high degree of, observation and caution, and nobody who is ill, under the influence of drink or drugs or otherwise incapacitated should enter a construction site.

4.1 Falling

FALLING INTO HOLES AND EXCAVATIONS

Watch for

- Un-fenced excavations.
- Un-guarded manholes.
- Holes hidden by long grass.

Do Not

- Walk close to the edge of steep sided excavations.
- Step back into holes.
- Stand or climb on struts and railings.

Do

- cross trenches by means of walkways.
- use the ladders, walkways and handrails provided.

Note:

- Cover all manholes after entering and leaving. Do not leave manholes uncovered at any time.
- Do not work near uncovered holes, trenches or deep channels that have not been covered. Let the Safety officer know if any such condition exists at once

4.4.1 Falling on the Level

Occurs not only at ground level but also on scaffolds, flat roofs and intermediate floors.

Usual Causes

- slipping
- tripping

Watch For

- loops of partly buried wire or reinforcement
- uneven surfaces
- oily patches
- debris
- mud
- wet patches
- icy patches.
- loose board

Beware
- muddy boots
- all surfaces after it has been raining

Note:
- Walkways should be cleared of slippery material. The work area should be kept tidy.
- Slippery areas should be treated
- Clear all debris after finishing task.
- Walkways should be kept clear of debris.

4.1.2 Falling from height

Watch for
- loose boards covering openings.
- insecure hand railing, fencing, barriers.

Do Not Walk
- along the top of high narrow walls.
- along the edge of tanks.
- along the top of pipes.

Note:
Roof and floor edges should be guarded by barriers. When working over open access points all persons should wear a harness and be clipped on to a suitable anchorage point

4.1.3 Falling from ladders

Usual causes
- slipping off the ladder.
- ladder slipping outwards at the bottom.
- ladder slipping sideways at the top.
- ladder too short.
- rungs breaking.
- rungs missing.
- missing rungs.
- wet, greasy or icy rungs.

Do not
- use a "home-made" ladder (e.g. with square rungs nailed to square stiles).
- carry equipment when climbing (hoist it with a rope).
- wear over-long, loose or flapping coats.
- over-reach, move the ladder instead.

Do
- face the ladder always.
- maintain a firm handhold.

Ladders Should

- stand on a first level base.
- has their trussed side underneath.
- be dug in on uneven ground, not perched on block.
- be tied at the top.
- project at least one metre above the top landing.
- be protected with clear varnish, not painted.

Should Not

- be perched on a drum to gain height.
- be supported by placing a rung on a plank.
- Platforms should be not more than 10m. apart vertically.

Handling and Storage

Ladders should be handled with care. If a ladder is dropped or hit by another item such that the ladder may be damaged, then it should be taken out of service and inspected by a 'Competent' person.

Ladders should be stored horizontally on racks with an adequate number of support points. Ladders should not be stored near heat sources or near dampness or in the sunlight or in any other condition that may damage the ladder.

Maintenance

Ladders should be annually inspected by a 'Competent' person. All ladders should be labelled with the date of the inspection and who inspected the ladder. Where a ladder fails such an inspection it should be withdrawn from service immediately. Ladders should be kept clean and free from oil/grease/mud or any other item that may make the steps slippery or may damage the ladder.

4.1.4 Falling from Scaffold

Watch for

- Debris
- Obstructions
- Slippery patches
- Loose scaffold boards
- Defective scaffold
- boards which (large knots, clusters of knots, splits)
- Projecting scaffold tubes.
- Cantilevered scaffold boards scaffold boards may tilt.

Do Not Use

- staging made of planks on drums or stacks of bricks.
- Uncompleted scaffolding
- Scaffolds without handrails and toe boards
- Scaffolds which are too narrow(usual width has three scaffolds- boards)
- Scaffolds which has been altered but not reinstated.
- Take care-after it has been raining.
- When boots are muddy.

Note

- There should be warning notices on incomplete scaffolds. Scaffolds should be evenly and firm set on frim foundations, tied at intervals vertically, strongly braced.

4.1.5 Falling from Scaffold

GENERAL

- Be careful
- not to knock debris onto people below.
- to lower and lift equipment properly.
- to carry tools and equipment in a haversack or toolbox and to fasten it properly.

Watch for

- scaffolds without toe boards.
- cranes and workmen overhead.

Do not

- stand beneath other work places unless there is a protective canopy
- Go into channels etc. which are not adequately lit
- Work near channels which are not properly covered.
- climb stacks of materials instead of a ladder

4.2 Tools and Equipment

General

- Keep clear of pneumatic breakers.
- Do not look directly at welding or flame cutting; protect your eyes with opaque goggles.
- Watch for splayed heads on cold chisels, metal chips may fly when struck.

Beware

- bush hammering
- wire brushing
- rust chipping
- shot blasting
- metal cutting
- stone cutting
- cartridge hammers
- grinding wheel
- cutting discs

4.3 Hazards and Resources for Mitigating Risk Identified

This section of the company's safety statement is assessed on a regular basis identifying hazards and risks and representing as it would a variety of facilities for dealing with hazards identified.

4.3.1 Identification of Hazards

Xylem Water Solutions Ireland will carry out regular Hazard Audits internally. The company further commits to make use of the advice available through the National Authority for Safety Health and Welfare at Work. Where necessary, the company will make use of competent consultants and bodies with special skills and services to augment the internal audits.

The Safety Auditors will concern themselves with all aspects of our operations and will advise and take account of all of the following potential hazards.

- Access/egress problems including
- Noise & vibration. floors, steps, ladder etc.
- Machinery safety including both
- Heat & humidity. production & maintenance risks.
- Electrical safety including standards
- Systems of work. at fuse boards, wiring standards etc.
- Lighting and ventilation
- Internal transport.
- Manual handling operation/posture
- Maintenance operations.
- Handling of chemicals and storage of chemicals
- Hygiene and Welfare
- Fire Safety
- Use of protective equipment
- First Aid
- Electrical hand tools
- Portable generators.
- Lifting and hoisting equipment
- Sewage stations.
- Construction site operations

4.3.2 Special Hazards Identified

Tasks identified in the hazard identification and risk assessment exercise must be carried out according to a set procedure. The procedures are in place to control risks, which could arise from misunderstandings between personnel involved or the actions of others unaware of the activity.

The procedures are subject to revision from time to time. No person may work at the tasks in question unless trained and authorised to do so.

4.3.3 Engineering Hazards Out

Where practicable Xylem Water Solutions Ireland commits itself to dealing with the hazards identified - firstly on the basis of their elimination by engineering means; be that machine guarding, replacement of a hazardous substance with benign or less hazardous substance, provision of special tools or access arrangements etc. This approach will take into account, the norms in our industry, the expert advice available and objective standards or guidelines where they are available. The person(s) responsible for this area of safety shall examine the options available for dealing with the problems, which have been identified taking account of the extent of the problem. If the problem can only be resolved with significant expenditure the person responsible shall present the options available to the Managing Director for decision.

4.4 Identification / Minimisation

It is the policy of the company to carry out internal risk assessments annually and when new processes / procedures are implemented.

4.4.1 Company Transport

HAZARD IDENTIFIED/RISK ASSESSED

Cars/Vans - If these vehicles are not properly serviced on a routine basis then this may present a hazard to the drivers and others in the case of a puncture particularly when in transit.
Truck and hi-ab. Again the above hazard applies here also, together with the hi-ab/crane. If this is not operated correctly and serviced regularly it could become a hazard by dropping loads, overloading and failing to operate during an activity, respectively.

Transporting Materials - unsecured equipment or poor tying down or strapping of equipment can create a hazard, as would also be the case for overloading.

All the company cars and vans are serviced regularly.

MEASURES FOR MINIMISING RISK

A system of official routine reporting exists for all cars and vans by their respective drivers. This is controlled by one person, who in turn arranges the services and repair.

Service of the truck and hi-ab follows the same procedure as that for the company cars and vans.

Those who use the hi-ab on a regular basis are now experienced in the use of this crane and undertake pre-operational checks.

Those who are not familiar with the hi-ab are unauthorised to operate it.

All materials are properly secured when carrying any size loads.

Straps, ropes, wedges etc. are available to insure the safe transport of consignments.

Slings are provided for positioning any heavy or awkward items in place.

4.4.2 Workshop Activities

HAZARD IDENTIFIED/RISK ASSESSED

Drying Stators - The lifting of a stator with the forklift and leaving it in position in front of the warm air heater is a hazard particularly if the starter is not secured on the forks.

Pump Testing – when making electrical connections into the test control panel, a hazard may exist if the cables are run into the front of the panel and not allowing the door to be closed thus resulting in an accessible and open live panel.

Gas Burner/Dropping Stators – If the gas is switched on and has not been ignited, then this is an obvious hazard. Poor suitability of an item being heated may cause this item to fall or roll. The surface temperature, when coming in contact with anyone could burn that person.

The method of drying out an electrical stator is by strapping and/or wedging it into place on the forks (depending on its size), thereby securing it whilst the heater provides the drying process.
It is our intention to examine this procedure, in an effort to set-up an alternative method which will provide a safe working practice.

The cable from all electric motors are run up thru the cable opening in the bottom of the control panel. With the power-off, the connections are made, and the panel is then made with the door securely closed.

MEASURES FOR MINIMISING RISK
Motor casings and stators are generally securely hung over the gas burner using the 'A' frame and chain hoist. For small units, the casings are wedged securely into place.

A one-man operation in the switching on/off of gas and igniting same exists to insure sole responsibility and awareness of the dangers.

The service personnel are always present during the procedure from start to finish.

4.4.3 Internal Transport

HAZARD IDENTIFIED/RISK ASSESSED
Forklifts - these could cause serious injury if they struck personnel. They could also present a hazard to drivers and others if they overturned and caused stacked materials to fall.

Our forklift operators drive into the body of trucks during loading and unloading operations. If the truck were to move at the instant the forklift was entering it, the forklift operator could sustain severe injury

TRAINING: Training for 'rider-operated lift truck' operatives is provided by the company. This is generally in accordance with the "Code of Practice – Rider-operated lift trucks: operator training.

This provides for maximum 3-year refresher training depending on experience and usage.

MEASURES FOR MINIMISING RISK
It is our intention to instruct those who use the forklifts, in the safe operation of same. This should be completed within 6 months.

Forklift drivers are required to report any defects they note to their immediate supervisor.

Our forklift undergoes statutory examination once every 12 months. Any defects found are rectified within the permitted timeframe.

A considerable amount of our forklift activity occurs in the good in/goods out and stores areas where pedestrian traffic is present but minimal.

Drivers must report any damage to racking to their supervisor/manager.

4.4.4 Manual Handling

HAZARD IDENTIFIED/RISK ASSESSED
Manual handling - poor manual handling techniques may cause backache or injury. Objects falling on people's feet could cause foot injury.

MEASURES FOR MINIMISING RISK
It is our intention to make training in manual handling available to employees who move heavy or awkward loads. This training should be made available within six months. Employees are not

required to lift or handle loads, which are too heavy or awkward to be safely handled. Assistance is available for such loads.

NOTE: While this is applicable to all employees it is particularly relevant to female employees. Trolleys and other mechanical aids are provided in order to avoid unnecessary manual handling and employees are required to use them where possible.

4.4.5 Electrical Hazards

HAZARD INDENITCIATION/RISK ASSESSED

Poor electrical installations/apparatus or incompetent personnel interfering with electrics can result in electrocution, electric shock, burns and fire. This can result in serious or fatal injury.

Damaged electrical apparatus (this includes cables, appliances, and connection points). Electric panels/fuse boards – accessible busbars live parts create a hazard.

Where Fuses/MCB's are not identified or are incorrectly identified, a situation may arise whereby the incorrect fuse/MCB is withdrawn to isolate power from machinery, equipment etc. during maintenance work. This could result in a maintenance person working on a live circuit or on plant or machinery which is not isolated.

MEASURES FOR MINIMISING RISK

The electrical installation is maintained by competent persons. Testing of any new electrical work and on existing installation when faults are detected is carried out by those persons also.

Earth Leakage Circuit Breakers (ELCBs) protect socket outlets. These are set to trip at 30mA and are tested on a regular basis

Inspection of all electrical apparatus is carried out as part of our regular hazard inspections and any faults found (e.g. damaged cables, plugs, socket outlets etc. are reported immediately and remedial action is taken. Temporary repairs and use of unauthorised electrical apparatus is not permitted.

HAZARD INDENITCIATION/RISK ASSESSED

If a clear area were not maintained around electric panels/fuse boards, an electrician would be unable to move away in the event that (s) he gets an electric shock.

Outdoor electrical connections and apparatus - damaged or unsuitable electrical apparatus creates a significant risk, especially in wet weather.

MEASURES FOR MINIMISING RISK

All electrical panels/fuse boards are checked on a regular basis.

Where fuses are missing protection is provided to prevent access to busbars. This is normally achieved by replacement of fuse holders.

Where electrical panels are accessible, live parts are adequately protected, e.g by insulation cards.

Fuses/MCB's are identified.

A safe means of access to an egress electric panels is provided and a clear work area is maintained around electrical panels at all times. These are to be of weatherproof construction.

4.4.6 Housekeeping

HAZARD IDENTIFIED / RISK ASSESSED

Poor housekeeping - can result in slips, trips, lacerations and falls. Casual storage of combustibles, e.g. paper / paper products can also create a fire hazard.

Slippery floors - hydraulic oil leaks can create oil spillage on our floors. Spills of water and oil are extremely slippery and could cause serious injury.

MEASURES FOR MINIMISING RISK

It is our policy to promptly dispose of waste materials.

Floors and passageways are kept clear of obstruction and this is monitored on a daily basis. Passageways are clearly identified; storage areas are adequate and clearly defined.

It is our policy that all spillage's / leakages be cleaned up immediately by the person responsible for them and equipment is provided for doing this.

4.4.7 Storage Facilities

HAZARD IDENTIFIED / RISK ASSESSED

Storage - poor storage arrangements can result in falling objects, trips and falls which could injure personnel (give an indication of the extent of injury which could occur from poor storage arrangements in your organisation) e.g. Unstable equipment stored on racking pallets, boxes, parts etc. left in the passageways.

Access to racking – poor access arrangements could result in falls. If a person fell from a height this could result in severe injury.

If damaged pallets are raised / lowered by forklift truck, they could break and their contents fall as a result. This could cause serious injury.

MEASURES FOR MINIMISING RISK

The racking in our storage areas is adequate for our needs and is properly secured.

OR

Overloading of racking (this includes the smaller racking units in our premises, e.g. in the offices) is prohibited.

Where necessary, employees are required to ensure that heavy and / or awkward items are stored at a low level to prevent overbalancing units) while allowing their safe retrieval.

Safe access is provided to racking by means of portable steps.

Employees are prohibited from climbing on racking or shelving units for any purpose.

Incoming pallets are inspected to ensure that they are in good condition and free from defects. If any damaged pallets are detected, they are immediately taken out of service.

Part 5 – Waste Management

5.1 Storage Facilities

PURPOSE

To ensure that all waste generated at Xylem Water Solutions Ireland is recorded and disposed of in line with current legislation and Xylem Procedure 1-7.

REFERENCES

The Health and Safety at Work Act 2005

SCOPE

This procedure applies to all premises under Xylem Water Solutions Ireland Ltd. direct control.

RESPONSIBILITIES

All managers are responsible for the implementation of this procedure within their designated areas of control. Employees and sub-contractors have the responsibility to adhere to the procedure.

PROCEDURE - OFFICES

- All waste must be clearly identified and stored in the containers provided.
- All paper should be recycled and disposed of in the designated recycling trays on desks and collated at the central collection points.
- General waste should be disposed of in the waste bins at desks, tea station and canteen. General waste is disposed of to landfill.
- Cardboard should be left at the bailing machine for recycling.
- Toner cartridges for faxes, printers, and photocopiers to be kept in marked box in the main office. Collected by the equipment suppliers for disposal.

PROCEDURE - WORKSHOP

- All waste must be clearly identified and stored in the containers provided.
- All paper should be recycled and disposed of in the designated recycling trays on desks and collated at the central collection points.
- General waste should be disposed of in the waste bins at desks, tea station and canteen. General waste is disposed of to landfill.
- Cardboard should be left at the bailing machine for recycling.
- Toner cartridges for faxes, printers, and photocopiers to be kept in marked box in the main office. Collected by the equipment suppliers for disposal.

All wastes must be segregated into the following:

- Metal Parts
- Cable
- Food, scrap, trash etc
- Waste oil
- Paper, Cardboard
- Hazardous Waste including oils and cleaning products
- Timber/Pallets
- Printer Toners
- Fluorescent Tubes
- Batteries

STORAGE & REMOVAL:

Metal Parts

- to be stored in containers outside, at the rear of the building. A container is marked scrap. An outside merchant removes the waste metals twice yearly.
- Cable - damaged and cable off-cuts to be placed in a container outside, at the rear of the building. An outside merchant collects this cable waste.
- Food scrap, general domestic etc. - this waste, generated on daily basis, should be disposed of in bins located at desks, tea station, and canteen. It is stored in refuse sacks in two local authority wheelie bins, which are collected by the local author
- Waste oil - waste oil and drums, after use should be stored on a sealed retention bund at the rear of the workshop. A licensed contractor will collect these when required.
- Paper / Cardboard – All paper should be recycled and placed in the designated recycling trays on desks and collated at the central collection points. All cardboard box packaging should be placed in the compactor located in the factory. The cardboard should be "bailed" once a day and put aside for collection by licensed contractor.

Hazardous Waste

- All hazardous waste i.e. paint brushes, oil cloths, remains of paint cans, cleaning granules etc. should be placed in the black waste drums located in the Workshop area. A licensed contractor will collect these when required.
- Timber/Pallets: - All waste timber to be stored in the designated area outside, at the rear of the building. An outside recycle merchant removes the timber once yearly.
- Printer toner – All used cartridges to be kept in the marked box in the main office. These are collected by the equipment supplier for disposal.
- Batteries: - All used or discarded batteries should be disposed of into the hazardous waste black drums located in the workshop area of the building.

RESPONSIBILITIES

It is the responsibility of each head of the department to ensure that any waste generated by that department finds its way to the relevant waste areas without delay and is collected when ready for dispatch.

5.2 Waste Management – Oil Interceptor

MONTHLY INSPECTION

Covers should be lifted and levels noted, and the monthly inspection record sheet signed. Contact service manager should Oil Interceptor need to be emptied.

ACTION TO BE TAKEN EVERY 6 MONTHS

Contents to be removed and unit to be cleaned. All documentation to be signed and retained in the Health and Safety file. C1 License to be supplied by contractor.

QUARTERLY SAMPLING:

Sample analysis to be carried out every quarter by an independent source and reports obtained.

Part 6 – Spills and Emergencies

RESPONSE PLAN

OIL, PAINTS, CLEANING AGENTS ETC.

All oil drums are positioned on the metal oil bund container at the rear of the workshop. In the event of any spills during normal workshop activities, the collected spilled oil is covered with granules allowed to soak and disposed of as hazardous waste. The paints and solvents cabinet is used in the same manner as the oil bund receptacle.

Xylem Water Solutions Ireland Site Safety Co-ordinator must also ensure that authorised visitors to the site are informed of the need for them to be safety conscious. Visitors may be divided into two categories:

- those who can reasonably be expected to be aware of the common hazards on construction sites, e.g. visitors from head office, technical officers of the client and visiting specialists.
- those who cannot reasonably be expected to be aware of the common hazards on construction sites e.g. parties from clubs or schools and non-technical officers of the clients.

The former category must be warned of any hazard which is not obvious, or which has altered since a previous visit but may, if appropriate, be allowed to visit the site or a part of the site without being accompanied. The latter category must always be accompanied on site by a responsible person aware of the hazards. Arrangements for conducting parties of visitors around sites must always be agreed with contractors' own safety officers in advance.

The Local Safety Officer must always act through the Resident Engineer. He must also bear in mind that his responsibilities do not extend to the safety of the works or to the health and safety of those not employed by the Firm except insofar as they may be affected by any acts or omissions on the part of the Firm's employees.

All accidents at work involving a Firm's employee or seconded employee are to be reported to the Site Safety Officer as soon as practicable who shall: -

- record the accident in an appropriate accident book.
- notify the Department of Labour of all accidents causing death or disabling a person for more than three days.
- notify the Firm's Safety Officer of all accidents causing death or disabling a person for more than three days together with a brief report on the circumstances and recommendations about possible action required to prevent a recurrence of a similar accident.
- Ill health caused by toxic substances must be reported, but not common ailments.

Site Safety Officers should consult other Safety Officers on site so as to ensure so far as possible that:

- All Safety Officers are informed about all accidents with a view to preventing the recurrence of similar accidents.
- All are informed of existing or potential hazards, which might affect them.

Site Safety Officers must ensure that the telephone numbers of local emergency services - doctors, ambulances, hospitals, fire stations, and police - are prominently displayed in a suitable position such as the main notice board or adjacent to the most readily accessible locations.

Part 7 – Electrical Safety

7.1 General

Electrical equipment is subject to regular inspection and maintenance to ensure that it remains in good condition. As an additional precaution Xylem Water Solutions Ireland provides for extensive testing of electrical installations at intervals of approximately 12 months. The testing includes all the parameters set out in the testing report ER1 approved by the Minister for Labour in line with the standards set out in the Factories (Electricity) Regulations 1972/79.

7.1.1 PAT Testing, General Testing and Authorisation

PAT testing (portable appliance testing) will be undertaken directly by a special contractor certified for this work.

7.1.2 Authorisation

Xylem Water Solutions Ireland qualified electricians/service engineers and contractors are available to undertake all electrical in-house fault findings or repairs. Procedures adapted will be the same as those required by 'Electrical Industry Rule and Regulations'.

7.2 Lock out Programme

PURPOSE:

To describe the procedures for lockout of electrical equipment.

PROGRAMME OVERVIEW AND POLICY STATEMENTS

1. Responsibility and authority for the lockout programme has been assigned to the Services Manager. This individual has received training sufficient to properly supervise the lockout/tag programme. The responsibilities include the monitoring and evaluation of hazards, maintaining records and conducting programme evaluations.
2. Whenever work is performed on equipment that will require an employee, customer, user etc. to expose himself/herself to an unexpected energisation, start-up, or the release of stored energy, the employee must protect against equipment operation while they are exposed. This will be accomplished by means of lockout hasps on the equipment.
3. Equipment requiring lockout includes all electrical equipment, gas lines and process fluid lines/valves.

RESPONSIBILITIES

The company has determined which specific applications require the use of lockout and/or tag procedures and provides the proper equipment to meet the needs of each specific application.

Management is responsible for ensuring that all relevant personnel are completely knowledgeable regarding the lockout programme. They are responsible for ensuring that employees comply with all facets of this programme.

Employees are required to use the appropriate lockout equipment, as provided. Employees are also required to maintain the equipment in an operable condition.

The Engineering Services Manager is responsible for selection, issuance, training, and fit testing of all lockout equipment including recordkeeping.

REQUIREMENTS

- The lockout device is for use on electrical isolators and valves. The following employees will receive training:
- Authorised Employees: These are employees whose job requires them to lockout machines or equipment in order to perform servicing or maintenance on that machine or equipment. An affected employee becomes an authorised employee when that employee's duties include performing servicing or maintenance on the equipment.
- Affected Employees: These are employees whose job requires them to operate or use a machine or equipment on which servicing, or maintenance is performed under the lockout rules.
- Other Employees Identified: Employees whose job requires them to work in the area where servicing or maintenance is performed under the lockout rules.

Each authorised, affected, or other employee is given initial training and retraining is provided for authorised and affected employees whenever there is a change in their job assignments, a change in machines, equipment or processes which present new hazards or when there is a change in the energy control procedures.

Includes the following topics:

- for each authorised employee, recognition of applicable hazardous energy sources, and the methods and means necessary for energy isolation and control.
- for each affected employee, the purpose and use of the energy control procedure.
- for all other employees whose work operations may or are in an area where energy control procedures may be utilised, the procedure and prohibition relating to attempts to restart or re-energise machines or equipment which are locked out.

Additional re-training will be provided if inspection of the programme reveals that there are deficiencies in the programme. The re-training will re-establish employee proficiency and introduce new or revised procedures.

The company will certify that employee training has been performed and is up to date. The certification will include the name of each trained employee and the training date(s).

7.3 Lockout Procedures

- Identify the main power source and lock it in the "Off" position. Place the approved tag on the lock.
- Inform the manager/supervisor of all affected employees that the lockout is being utilised in their area and that operation of the locked equipment cannot occur.
- Equipment will be tested following lockout to ensure that all power has been shut down. Following the test, the operating controls must be returned to the "Neutral" or "Off" position.
- Locks must remain in place until the work is completed and all employees are clear of the equipment. No one is permitted to remove a lock except for the person who placed it there. The only exception is when the employee is unable to remove their lock.
- As each employee finishes their aspect of the work, they will remove their lock. The last person to complete work will remove their lock and the lock device.

7.4 Test Procedure – Electrical Control Panel

XYLEM WATER SOLUTIONS IRELAND WORKSHOP TEST PANEL OPERATING PROCEDURE

This test equipment is only to be used by suitably qualified and trained staff as assessed by the Company Safety Policy.

At start of test and following completion of test the Control Panel should be left in the following state:

- Main isolator switched off
- Key switch switched off and key removed Emergency stop pushbutton activated
- Pushbutton wander lead plugged out and safely stored Test leads plugged out and safely stored

Test sequence to be completed in the following stages:

- Inspect all test leads and replace if faulty or damaged Connect test piece to the appropriate outlet socket Locate wander lead adjacent to the test piece and plug in
- Switch on main isolator and operate voltmeter switch to ensure the mains supply is healthy
- Operate lamp test pushbutton to ensure all operator status lamps are functional
- If there is a fault on the mains supply or a lamp fails have the problem rectified before continuing any tests
- Select the required test circuit, 400v/63A, 400v/32A, 230v or 110v using the selector switches provided
- Release the panel and wander lead emergency stop buttons Operate the Emergency Stop Reset button
- Insert key switch and switch on
- Test may now be carried out using the stop/start buttons on the control panel or the stop/start buttons located on the wander lead
- While test is in operation the warning beacons will flash
- Switching on the key switch will operate the warning siren for 30 seconds, following this initial warning the siren will continue to operate for the duration of the test on an intermittent basis, 1 second every 10 seconds.
- Emergency Stop Button. If this button is activated during a test, the test can only be re-instated by operation of the Emergency Stop Reset Pushbutton
- As this is a test panel to cover various motors there is no overload protection provided. Over current and short circuit protection are only provided. While testing a motor the appropriate Ammeter(s) must be observed to ensure the ampage does not exceed the full load current stated on the motor nameplate.
- If an over current or short circuit situation occurs the circuit protection MCB will operate, this will be indicated by the relevant status lamps, the fault must be investigated fully including connections to the test piece and test leads before the test is reapplied.

On completion of the test the equipment is to be returned to the following status in the sequence detailed.

- Stop button activated
- Emergency Stop buttons activated
- Switch off and remove key switch
- Switch off main isolator
- Plug out test leads and store safely
- Plug out wander lead and store safely

Part 8 – Contractors and Site Safety

8.1 Procedures for Contractor coming to site

Insurance's must be made available for inspection and checked by our insurance brokers. Contractor must liaise with Xylem Water Solutions Ireland. at all times.

All sub-contractors employed by Xylem Water Solutions Ireland to work on external sites to possess a current 'safe pass' card together with 'safety statement'.
The following general rules apply:

- All contractors must liaise with our safety representative before commencing work.
- Safety procedures must be observed and put into practice by all contractors.
- No assumptions will be made when there is even possible risk to the health and safety of others.
- If the contractor is uncertain or unclear about any aspect of safety during operations on site 'ASK' our safety representative.

8.2 Construction Site Safety

Responsibility for the safety of the Works (as described or defined in the various contract documents) and for safe methods of construction or erection rest with the various contractors and their sub-contractors all of whom have defined contractual relationships with each other, the representative, the Resident Engineer.

Construction sites by their nature tend to have a comparatively high number of potential hazards many of which are very temporary or arise from minor omissions or accidental damage which can be rectified quickly and immediately.

It is the duty of everyone working on the site to minimise such hazards regardless of whose legal responsibility the hazards might be.

Often the hazard can be drawn to the notice of the nearest representative of the responsible contractor and no further action need be taken except to check subsequently that the fault has been rectified. Apart from the hazards described in the preceding paragraph any apparently or potentially unsafe situation pertaining to the site, the Works or Temporary Works must be reported to Xylem Water Solutions Ireland, Site Safety Coordinator.

Xylem Water Solutions Ireland. Safety Co-ordinator shall take one of the following courses of action as appropriate:

- give the contractor(s) formal written notice of the situation, pointing out in what respects it is considered unsafe.
- require the contractor to rectify matters, subject (where appropriate) to the Engineer's approval of the contractor's proposals.
- he may, if necessary, go further and recommend measures to improve the situation but if he does so he should distinguish between recommendations and instructions and should make clear that his recommendations do not affect the sub-contractor responsibilities.
- he may request a sub-contractor to remove from the site any employee who persistently adopts unsafe practices.
- he may notify the Engineer who may order a suspension of work.
- as a last resort and after informing the contractor(s) of his intentions he may inform the local office of the Department of Labour of any situation he considers unsafe.

The cautious approach described in the previous paragraph must be abandoned in emergencies or if danger appears to be imminent. In such cases members of staff must immediately warn all persons involved and must take whatever action is considered necessary.

8.3 Site Safety

The site safety co-ordinator shall be responsible for area safety, after that area has been handed over to the M & E Contractor.

He/she shall ensure any person(s) working in this area shall follow the directions laid out in this document, and work in a safe manner.

No equipment shall be powered or operated without consulting the site safety co-ordinator first. He shall in turn inform other safety co-ordinators also present on site of any equipment start-up or powering up before proceeding.

8.4 Mechanical and Electrical Installations

The installation and commissioning of mechanical plant suffers many of the dangers which are met in civil engineering construction because it is incomplete and therefore not yet safe.

In addition to the recommendations in the foregoing sections:

- Beware incomplete, loose or partially anchored ladders and hoops, walkways, platforms, handrails, guards, covers, handholds.
- Beware oily and greasy patches on walkways and handholds.
- Beware moving parts of machinery which might be under test when partly installed and without guards.
- Beware metal items which might be hot after cutting or welding.
- Beware flying particles from cutting or grinding wheels, chipping hammers, compressed air jets, wire brushing.

Keep clear of:

- suspended loads
- travelling cranes.
- unprotected electrical leads.
- pipework, valves, and vessels under pressure test.
- winch ropes.
- hoist ropes.
- shot blasting
- paint sprays

8.5 Procedures for Contractor coming to site

- Watch for overhead power lines when carrying metal staff, ladder, scaffold tube etc.
- Watch for overhead power lines when climbing ladders, walking on scaffold and roofs.
- Do not touch cranes or their loads, which are near overhead power lines.
- Use only properly earthed and insulated electrical equipment with the correct fuses, which is in good order and regularly checked.
- Do not improvise.
- Do not use improvised installations.
- Keep cables out of pools of water.
- Find out the position of underground cables before excavation is commenced.

8.6 Miscellaneous Hazards

- Nails projecting upwards from timber on the ground. (They should be hammered flat).
- Nails projecting from timber in formwork. (They should be cut off or hammered flat).
- Places which are badly lit. (Take extra care as you move about and use an electric torch if necessary).
- Noisy places which could damage hearing and mask warning sounds. (Wear earmuffs and be extra observant where levels exceed 85 d B (A).
- Dusty atmospheres which could damage lungs. (Wear face mask, particularly if there could be asbestos particles in the dust).
- Flying particles from grinding, burning steel, etc. (Wear eye protection).
- Inability to summon help in an emergency. (Inform a responsible person if you must visit the site alone outside normal working hours. Never undertake possibly hazardous operations without first ensuring that somebody will monitor your progress and call assistance promptly if needed).
- Burns due to splashes from hot molten substance such as bitumen and wax. (Keep well clear or wear protective clothing).
- Unrestricted air hoses. (Check that hoses are properly connected before opening any compressed air valve).
- Head injuries. (Wear a hard hat at all times on site).
- Fumes from paints, solvents, etc. (Wear breathing apparatus if adequate ventilation cannot be provided).
- Electrical appliances use. (Ensure that EEX rates in sewers, pumphouses or other potentially explosive situations).
- Risk of disease from sewage e.g. Weils Disease or Leptospiral Jaundice. (Wear heavy-duty gloves; do not enter sewers if you have cuts or wounds).
- Lead from paints during welding and cutting operating. (Have blood lead measurements completed by a Department of Labour approved doctor. Levels should always be less than 40 micrograms of lead per 100 cubic centimetres of blood).

8.7 Contract Procedure

Step 1
Refer to ESH Safety Statement included in all quotations.

Step 2
Acknowledge order received:

a. request safety statement.
b. issue ESH (site) statement.
c. Specific ESH points relating to the project.

Step 3
Site Visit.

a. record and confirm all ESH requirements to be provided the customer.
b. list all ESH requirements by Xylem Water Solutions Ireland.

Step 4
Meeting.

a. Agree and confirm all ESH issues and responsibilities with customer

Step 5
Safe System of Work / Method Statement. /Risk Assessment
a. Issue document to customer.

Step 6
Commence Work.
Specific ESH check list completed by Xylem Water Solutions Ireland on site, before commencing work.

Step 7
Working On-Site.
a. All work carried out is specifically accordance with above agreed procedures and Company Safety Statement generally.

8.8 Pump station Building

Site Safety Officers must ensure that copies of the following publications (as appropriate) are kept in all site offices and are available to and observed by the Firm's staff on site. All staff engaged upon such works must read and take special note of their contents.

- LGTB Booklet "Safety in Sewers Training Manual".
- ICE/MHLG Booklet "Safety in Sewers and Sewage Works".
- ICE Booklet "Safety in Wells and Boreholes".

These booklets deal particularly with problems arising from working underground, falling into deep excavations, falls of material, bacterial infection (for example to injuries caused by falling), contamination of water supplies, dangerous atmospheres, and flooding. They also describe special safety equipment, which should be kept at site.

As works near completion there is an increasing risk that, inadvertently, electric circuits might be made live, equipment (e.g. pumps) started or wrongly operated sections of the work flooded with water and so on. Furthermore, there are likely to be several contractors or sub-contractors on site at this time and part of the Works may have been handed over to the client. The dangers of divided responsibility are, consequently, likely to be high.

Part 9 – Special Attention to Health Risks

Where health risks due to atmospheric contaminants or the use of hazardous substance or processes arise, it is the policy of Xylem Water Solutions Ireland to seek suitable occupational medical advice. We aim to err on the safe side in these matters since health problems may not always be obvious until the symptoms become advances. Hygiene is of great importance on all sites and particularly so on sites involving new connections to water supply or sewerage systems. All employees must use proper lavatory and washing facilities and must report to the Local Safety Officer any possible source of contamination to the public water supply or from the sewerage systems. All employees are expected to co-operate with these arrangements.

9.1 Welfare Facilities

Personal hygiene and general welfare facilities are provided at Xylem Water Solutions Ireland. All employees are obliged to care for these facilities and not to damage or misuse them.

9.2 Gas Detection Equipment

Portable gas monitoring equipment is provided for a service engineer or other Xylem employees whose activity requires him/her to enter an area where the possibility of gases may exist.

Each employee must wear this detector on his/her person at all times when in a confined space in particular. The monitor must be tested before entering to ensure correct operation. The monitor should be re-calibrated/serviced at least one a year by the supplier.

9.3 Medical Clearance for Respirator Wear

The company provides respirator wear for each employee directly involved in activities, which require the use of a dust mask only. Masks are also available for those employees occasionally involved in activities where air is contaminated. The company does not provide a breathing apparatus or any form of mechanical equipment to assist ones breathing capabilities.

All employees will complete the Employee Respirator Questionnaire, which he/she will sign.
If any of the answers are “yes” then this form is submitted to the company doctor for medical evaluation.

All records are confidential and maintained in the personnel files.

9.4 No Smoking Policy

THE PUBLIC HEALTH (TOBACCO) (AMENDMENT) ACT, 2004

Implications for employers and employees

As and from the 29th March 2004, the Public Health (Tobacco) (Amendment) Act, 1994, ("the Act"), prohibits any person from smoking tobacco in a place of work. A place of work is defined under the Safety, Health and Welfare at Work Act, 2005 as "any place, land or location at, in upon or near which, work is carried on whether occasionally or otherwise".

The definition is very wide and includes places that do not immediately come to mind, for example a vehicle used for work, irrespective of whether the vehicle is privately owned, or owned by the company. There are several exceptions to the new Act but for the vast majority of employers and employees the ban applies.

Section 47 (2): states that a person who contravenes the Act is guilty of an offence, this includes an employee. Employers should note Section 47(3) which provides that where a person contravenes the Act, "the occupier, manager and any other person for the time being in charge of the specified place concerned shall each be guilty of an offence". An employer is therefore guilty of an offence if an employee, customer, guest, or supplier is found guilty of an offence with fines for both of up to €3,000.

It is however a defence for an employer to show that it made "all reasonable efforts" to ensure compliance with the legislation. Employers should consider the following; -

- issue a policy statement to all employees notifying them of the ban on smoking, that it is an offence under the Act to smoke in a place of work, what fines are applicable and what steps will be taken by the employer for breach of the ban, e.g. initiating the company's disciplinary procedure,
- Display no-smoking signs in workplace areas and also in access areas to the premises e.g. reception,
- Remove ash trays from any place of work,
- Instruct the Personnel Manager/Safety Officer to check places of work where employees previously smoked to ensure compliance with the ban, and
- Provide employees with information to encourage them to quit smoking, such as the Irish Cancer Society Quit line service, or the Irish Heart Foundation service.

If an employer discovers that an employee has breached the ban, then it should deal with the matter reasonably and proportionately.

It would not be reasonable to dismiss an employee on the first occasion on which they are found smoking in a place of work; instead, the employer should initiate the company's disciplinary procedure and give the employee a warning.

Companies should consider amending its employee handbook or disciplinary procedure to provide for the smoking ban, or in the alternative, the company could circulate a policy statement providing that smoking tobacco in the place of work constitutes misconduct under the company's disciplinary procedure.

9.5 Working time Policy

It is the requirement of Xylem Water Solutions Ireland to comply with the Organisation of Working Time Act 1997.

Definition of 'Working Time'

Working time includes any time that the employee is at his/her employer's disposal and carrying on or performing the activities of his/her work. Working time is net working hours i.e.. exclusive of breaks, on call or standby time, statutory annual leave, sick leave, or leave granted under the Maternity Protection Act, 1994, Adoptive Leave Act, 1995, Parental Leave Act, 1998 and Carer's Leave Act, 2001.

Please Note: As this is a complex piece of law employers should seek advice from IBEC.

9.6 Pandemic Health Risk Outbreak

Where events relating to pandemic health risk arise Xylem respond to this using the Business Continuity Plan (BCP).

The principles of the BCP are based on:

- Government Advice
- Corporate protocol
- World Health Organisation (WHO)

Xylem BCP is a live document located on the link below along with any specific risk assessments and mitigation plans for dealing with an event.

https://oasis.xylem.com/emea/UK/eshqhome/ESH/Pages/Business-Continuity.aspx

Part 10 – Lifting Equipment

10.1 Working time Policy

USE OF LIFTING EQUIPMENT

Lifting equipment, e.g. chains, ropes, winches and lifting tackle etc., must only be operated by competent persons, i.e. those with sufficient skills, experience, and training.

Ensure that work equipment is suitable for the purpose for which it will be used and is thoroughly inspected, tested, and maintained as per manufacturer's instructions.

All lifting equipment must conform to statutory testing, examination, and certification.

10.2 Examination of Lifting Equipment

Ensure that new chains, ropes and lifting tackle have Certificates of Test and Examination specifying Safe Working Loads (SWL) before they are used. They are to be inspected before use and thoroughly examined at the appropriate intervals by a competent person. A written report is to be produced and made available for inspection as required

Ensure tests and thorough examinations of cranes etc. are carried out before they are first used and obtain a Certificate of Test and Examination specifying Safe Working Loads. Periodic examinations by a competent person are to be carried out at the prescribed intervals. A report is also to be produced and made available for inspection.

10.3 Lifting Operation, Chains, Slings and Lifting Tackle

All mechanical lifting operations shall only be done by and under the supervision of a competent person, e.g. a Lifting Co-ordinator. Proper slings, chains, shackles etc. must be used and correctly attached to the load and lifting device. All lifts must be carefully planned with clear set-down areas available.

LIFTING MUST NOT BE CARRIED OUT WITH PERSONS BELOW THE LIFT PATH

All lifting equipment must be clearly marked with its Safe Working Load (SWL) and should only be used to lift loads within the identified range. The employee slinging the load should conduct a visual inspection of the lifting equipment before it is put to use. If any doubt arises as to the suitability of the equipment the Lifting Co-ordinator and Manager / Team Leader must be notified immediately, and the equipment be taken out of service. Mobile cranes etc. will be hired from reputable organisations. The Hire Company will provide competent operators. Certificates for the crane, lifting tackle and operator training must be provided before the crane will be permitted to commence work.

10.4 Equipment Schedules

All lifting equipment is listed on the equipment schedules which record ID numbers, description, certificate date, test listing etc.

10.5 Forklift Trucks

This policy applies to all Xylem Water Solutions sites and operations where material handling equipment is in use or used by Xylem personnel.

It is the responsibility of all Managers and Supervisors to ensure that this policy is implemented in full within their respective departments.
All employees must ensure compliance with this policy within the scope of their works. For the purpose of this policy material handling equipment is defined as being:

- Forklifts
- Pallet trucks (manual and powered)
- Sack barrows
- Hoists
- Cranes
- Tripods/Easy Lift

This list is not exhaustive but covers the majority of equipment that is likely to be in use within Xylem.

- An inventory of all of this type of equipment must be maintained by each facility, detailing the serial number or identification number, last inspection date and the next due date. The lifting register compiled by Zurich Insurance Inspections will meet this requirement.
- All equipment shall be marked with the following information:
    - I.D number
    - Safe Working Load (SWL)
    - IF the SWL is dependent on the configuration of the equipment then SWL must be marked for each configuration
- All equipment must be maintained by an approved service provider at the recommended intervals by the manufacturer
- Daily checks must be completed, and all defects reported as per Policy I-30 “Defective Plant”
- Battery charging areas must be designated non-smoking, be well ventilated and have the suitable fire extinguishing materials available
- All ride-on forklifts must be fitted with a seat belt, which must be used during the forward motion of the machine, however short the journey may be. These must also be fitted with a flashing beacon and reverse warning alarm
- All operators must be trained in the safe use of such equipment, with refresher training provided at regular intervals, as per the industry norm
- The operators of forklift trucks must complete a medical every five years or sooner if deemed necessary by the company

Only those authorised and trained personnel are permitted to use the forklift. On start-up, the first operator of the day will complete the ‘check list’ as below. After the operator is finished his/her operation, the forklift will be parked in a safe place and in a safe manner. The machine will be switched off and the key left in place.

A copy of the checklist is located in **APPENDIX B** of this document.

10.6 Battery Charging

PURPOSE
To re-charge forklift battery when the forklift has run-down on its stored energy.

LOCATION
Outside the factory toilets.

PROCEDURE
Park the forklift in the space provided beside the charging unit. Observe protective clothing sign (i.e. Protective glasses and gloves). Check liquid level in battery and top-up if necessary. Connect leads of charger to battery on forklift. Leave unit to charge for a minimum of 12 hours. Disconnect and move from parking bay still observing the protective clothing sign.

RESPONSIBILITY
This activity is generally the function of the store's supervisor.

NOTE: Should spillage of the battery fluid occur, the operative will immediately go to the workshop locker area and wash any contaminated area on his/her person. If spillage only occurs on the machine or on the floor, the operative will clean all areas contaminated with absorbent granules provided and dispose of in hazardous waste bin. All accidents will be reported in the company accident report book.

Part 11 – Handling of Return Pumps (Repair & Rental)

The following procedure is in place to make aware and protect all employees who come in contact with any unfamiliar pumps with no record of background/history returned for service and repair, and rental units returned off-hire:

- The return goods clearance form (RGC) to be issued to the customer.
- Personnel receiving a pump at the factory must be suitable attired with the protective clothing issued.
- Before the pump is received into the workshop, the unit must be evaluated by the workshop manager/supervisor.
- The workshop manager/supervisor must obtain sufficient information from the customer by whatever means to establish what fluid the pump was pumping and any necessary material safety data sheets.
- All details must be passed on to the service engineer.
- He is then instructed to proceed with the repair/service or may not be, depending on the application.
- In the event of the pump indicating a hazardous media the unit will be washed down, at the rear of the premises, split and thoroughly cleaned with particular emphasis on the parts which have come in contact with the hazardous liquid.
- Once the service engineer and his supervisor/manager have satisfied themselves that the pump has been thoroughly cleaned of the hazardous material, the normal repair procedure then takes place.

Part 12 – Confined Spaces

REQUIREMENTS

The requirements of the Procedure are to apply equally to each confined space. They are to be compiled by all appropriate personnel employed by Xylem Water Solutions Ireland.
For all designated confined spaces, there will be a minimum of one top man and two engineers,

WORKING PROCEDURE PRIOR TO LEAVING FOR SITE

- Check that all appropriate equipment is available and in good order.
- Check atmosphere monitor is operating satisfactorily.

If for any reason, the monitor is not operational, report to your supervisor/manager immediately.

WORKING PRACTICE ON ARRIVAL ON SITE

- Locate the nearest working telephone.
- Advise the client of your arrival on site (if practical).
- Test gas monitor.
- Erect appropriate barriers and signs.
- Remove covers to ventilate area (minimum ventilation period 5 minutes).
- Effect electrical and mechanical isolation as appropriate.
- Test the atmosphere by lowering the monitor into the confined space, bearing in mind that some gases are heavier than others. It is, therefore, important to test all areas of the space. For vertical entry, the minimum test time is 5 minutes.
- A satisfactory test result must be obtained.
- If an unsatisfactory test result is obtained and forced ventilation is available, this should be activated for a minimum of 5 minutes.
- If forced ventilation is not available, a further ventilation period of 10 minutes should be given.
- Re-test the atmosphere.
- In the event of a further unsatisfactory test result, report to your supervisor/manager.

DO NOT ENTER THE SPACE.

- Continuous monitoring of the confined space must be maintained until the last period has left the space.
- If an alarm is given by the monitor, the space must be evacuated immediately.
- The operative, whilst working directly over or in the confined space must at all times have a separate/ independent 'lanyard' line attached from his harness to a secure fixing.
- When the work is completed, covers must be replaced; signs and safety barriers removed.
- Advise the client of your departure from site (if practical).

ADDITIONAL CONSIDERATIONS

- Smoking is forbidden in any confined space or within close proximity of the entrance
- Always keep an eye on changing weather conditions
- Remember that any noise created in a confined space creates difficulties in communications with the individual working in the space
- Do not place objects in the immediate vicinity of the sump

EMERGENCY PROCEDURE

Should the gas monitor give an alarm whilst any individual is working in the confined space, or if any individual begins to feel ill or experience giddiness, headache, pulsing of the temples, nausea, difficulty in breathing or irritation of the eyes, the space must be evacuated immediately.

Re-entry can only be made after further ventilation, testing and completion of the Permit to Work. In the event of an individual collapsing in a confined space, the top man must summon the emergency services immediately.

DUTIES OF THE TOP PERSON
The top person will be responsible for carrying out all appropriate tests and checks prior to entry by any individual into a confined space.

It is the responsibility of the top man to keep himself aware of all changes taking place around the confined space area. Consideration should be given to drastic weather changes or the presence of machinery/vehicles, which could cause exhaust fumes to enter the space.

The top person must be in regular verbal communication with the individual working in the confined space.

Under no circumstances may a top person leave the area surrounding the confined space, except to summon assistance in the case of an emergency

Part 13 – Fire, Emergency and First Aid Plan

13.1 Fire Hazards

POSSIBLE CAUSES

- Careless smoking.
- Radiant electric heaters.
- Spillage of fuels.
- Rubbish burning.
- Leaking gas cylinders.
- Flammable rubbish.
- Faulty electrical wiring or appliances.

HAZARDS

- Lack of alternative exit from building.
- Jammed escape door.
- Escape door blocked by stacks of materials, inside or outside.
- Corridors blocked.
- Fire doors wedged open (or held open by fire extinguishers).
- No fire extinguishers. Fire extinguishers out of order.

13.2 Fire and Evacuation Plan

Emergency Plans:
Plans for fire and other emergencies have been prepared.

Fire:
Plans to monitor evacuations and to tackle incipient fires where appropriate have been prepared. All employees are aware of the procedure of evacuation in the case of an emergency. In the event of an alarm all personnel on the premises must make their way directly via the fire exits to a meeting point outside the front of the building.

The sign in/out book together with the visitor's book is removed from the staff entrance desk by the Office Manager, and both a check on headcount and time taken to evacuate is recorded.

The main escape routes are:

- Main stairwell.
- Escape stair well between 1st floor offices and factory.
- Via Main Door (CORK)

Main Fire Exits

Num Extinguishers	Area
1	Staff entrance - Offices
1	Reception – offices
1	Fire Escape - offices
1	Factory Workshop/Stores

13.3 Fire Fighting Facilities

Ground Floor

Num Extinguishers	Area
2	Staff entrance in side door
2	Inside Front Shutter workshop area
1	Workshop Dirty Area –On wall center of repair area
1	Clean Water Area beside the back
1	Back Door Service side
1	Back Door rental side
1	Back door rental side –adjacent to
2	Far wall rental side –halfway up
1	Outside Service Canteen
1	Fire Blanket
2	Fire Hoses Workshop
1	Boiler Room
1	In Service Canteen

Top Floor

Num Extinguishers	Area
2	Office Floor Adjacent to door leading to workshop
2	Corridor leading to fire escape outside filing room

13.4 Fire and Other Emergency Drills

Xylem Water Solutions Ireland is committed to doing Emergency drills at appropriate intervals, at least two per year however this is dependent on any pandemic situations. Inspection of safety equipment and facilities provided is the responsibility of the persons named below. The drills are the joint responsibility of the persons with fire and training responsibilities.

PERSON RESPONSIBLE ARE:

Name	Job Title
Duncan Astin	Operations Supervisor
Michelle Shortt	ESH Administrator

13.5 Recommended fire procedures

IMMEDIATE ACTION

If electrical equipment is involved, switch it off.

If a person's clothing is on fire lay him/her flat; smother flames with coat or blanket, rolling him/her over to put them out.

Attempt to put out the fire using hoses or suitable extinguishers. Shut doors and windows to reduce draughts and contain the fire.

WARNING

If there is even the smallest possibility that the fire will gain control: Warn everyone in the building or vicinity.
Warn the Fire Station.

EVACUATION

When warned, everyone must leave the building immediately, closing all doors and windows and assemble outside for a roll call to ensure that everyone has escaped.

13.6 First Aid

13.6.1 First Aiders

Name
Patricia Maguire
Alan Walker

13.6.2 First Aid Boxes

Num First Aid Box	Area
3	Factory workshop and offices (Dublin).
1	Factory workshop and offices (Cork).
16	Field Service vans and vehicles

Each box is provided with the items requested by the 'First Aid in Factories Regulations 1975' Act

Persons responsible are:-

Name	Job Title
Michelle Shortt	ESH Administrator / Office Manager

13.6.3 Contents of First Aid Boxes

The 'First Aid in Factories Regulations 1975' requires minimum contents in first aid boxes. The following data complies with these regulations and includes further desirable features from the UK Offices, Shops and Railway Premises First Aid Order, 1964.

Contents	Contents No1 10 Persons	Contents No2 20 Persons	Contents No3 50 Persons
Guidance Leaflet	1	1	1
Assorted Plasters	20	20	40
Sterile Eye Pad Dressing	2	2	4
Triangular Bandage	2	6	6
Safety Pins	6	6	6
Medium Dressing No 8	2	2	4
Large Dressing No.9	2	6	8
Extra Large Dressing	2	3	4
Wipes	10	20	40
Disposable Gloves(Pair)	5	10	10
Paramedic Shears	1	1	1
Facemask	1	1	1
Crepe Bandage 7cm	1	2	3
Eye wash 500ml	1	2	2
Burns Dressing Small	1	1	1
Burns Dressing Large	1	1	1

Part 14 – Cooperation of Employees

14.1 Cooperation of Employees

Safety Health and Welfare at Work Act - General Duties of Employees:
It shall be the duty of every employee while at work –

a. to take reasonable care for his own safety, health, and welfare and that of any person who may be affected by his acts or omissions while at work.
b. to co-operate with his employer and any other person to such extent as will enable his employer and any other person to comply with any of the relevant statutory provision.
c. to use in such manner so as to provide the protection intended, any suitable appliance, protective clothing, convenience, equipment or other means or thing provided (whether for his use alone or for use by him in common with others) for securing his safety, health or welfare while at work.
d. to report to his employer or his immediate supervisor, without unreasonable delay any defects in plant, equipment, place of work, or system of work, which might endanger safety, health, or welfare, of which he becomes aware.

.
No person shall interfere with or misuse any appliance, protective clothing, convenience, equipment or other means or thing provided in pursuance of any of the relevant statutory provisions or otherwise, for securing the safety, health or welfare of persons arising out of work activities.

14.2 Premises – Entry / Exit

It is a requirement for all Xylem Water Solutions Ireland employees to sign in and out of the premises regardless of how many times this occurs during the course of a day. It is also the responsibility of the employee to sign in /out their visitors to ensure the company has a record of all persons and individuals on the premises at any one time. Two registers are present, one for employees (start time / finish time and daily in/out time) and one for visitors.

14.3 Accident Investigation

In the event of an accident this must be recorded in the company's accident report book. This book is kept in the company safe and access to this is available from management. The Director/ Manager responsible will then initial this recorded entry and will act accordingly. Accidents and near misses are investigated by the supervisors in the areas concerned and reports sent to the Safety Committee.

All employees are obliged to co-operate with such investigations and to provide any information, which may be useful in establishing the circumstances surrounding the accident.

Part 15 – Chemical Management

15.1 Purchase of Chemicals

It is the requirement of all Xylem Water Solutions Ireland employees to purchase those specific chemical types only i.e. paints, solvents, cleaning agents etc which appear on the company's approved chemical register list.

15.2 Safety Data Sheets

All chemical agents as indicated above are listed in the Company's "Safety Data Sheet" schedule and each sheet is fitted in the appropriate SDS folder.

Part 16 – Annual Report of Directors

XYLEM WATER SOLUTIONS IRELAND

It is our policy to report the progress with our health and safety policy as required by the Safety Health and Welfare at Work Act 2005, under the following headings:

- Safety Training.
- New Safety Arrangements
- Safety Consultation Group
- Purchase of Safety Equipment Emergency Drills
- Safety Programme.

APPENDIX A – ESH Induction Card

NEW EMPLOYEES – ESH INDUCTION CARD

As a brief introduction to Xylem Water Solutions Ireland's ESH Policies, the new employee must be aware of the following: -

- Company Safety Statement
  To be read by all employees

- ESH Induction session
  For any new employees

- Personal Protection Equipment
  Generally for on-site personnel, service engineers and personnel within factory / workshop

- National 'Safe pass' Certificate
  For all employees required to enter construction sites

- Confined Space Certificate
  For all employees required to enter confined spaces

- ESH Training Programme
  For all Employees

- Pre-employment & Periodic Medical Examinations
  For employees

Signed_____ Date_____

APPENDIX B – FLT Operation Checklist

xylem
Let's Solve Water

Vehicle Registration: B416A2831D

Week Commencing:

Only those authorised and trained personnel are permitted to use the forklift. On start up the first operator of the day will complete the 'checklist' as below. After the operator is finished his/her operation, the forklift will be parked in a safe place and safe manner. The machine will be switched off and the key removed.

	MON	TUE	WED	THURS	FRI
Hours					
Hand Brake					
Foot Brake					
Beacon / Light					
Reversing Alarms					
Tyres					
Water Weekly					
Visual Check / Mast / Forks External Condition					
Mast Hydraulics					
Safety Belt					
Seat					
Steering					
Operators Initials					
ALL FAULTS NOTED SHOULD BE RECORDED BELOW AND IMMEDIATELY REPORTED TO YOUR SUPERVISOR					

Defect Report:
Operators Signature:
Action Taken:
Supervisors Signature: Date: