



Personal
HES Manual (2. ed.)



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0. CONTACT DATA AND EMERGENCY PHONE NUMBERS

This manual belongs to:

Name:

Addr.:

P.O.B./City:.....

Tel. Private:.....

Employer:

Tel.

Contact Pers.:

Contact/significant other to be notified in case of an emergency:

Name:

Tel. Private:.....

Tel. Work:

Other Information:.....

.....



1. PREFACE

It is a requirement in Garda Síking AS that all work is carried out so that the health and safety of everyone involved is taken care of in a satisfactory manner and that everyone take care of the environment. This HES Manual contributes to this by providing you with the correct information concerning Emergency Phone Numbers, General Guidelines, HES requirements, Safety Policies, Emergency, Accidents and Near-Accidents, First Aid, How to Give and Receive Support, Emergency Phone numbers, some key terms and abbreviations, Signs of Danger and Hand Signals.

All Garda companies honour this HES Manual.

You will find included an Incident and Safety Analysis Form for the registration of accidents, near accidents, deviations and suggestions for improvements, as well as Safety Analysis Forms. These Forms are part of our continuous strive to improve.

The Garda companies have a common objective and policy.

All together this is based on our, on Garda Síking's, mutual values, cf. back cover.

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Incident and Safety Analysis Form

2. GENERAL

2.1 INTRODUCTION

All companies in the construction business are by legislation and regulations required to prepare their own HES plans adapted to the scope and risk of their own work (cf. AML, BHF, IK).

This personal HES Manual is part of the preventive health, environment and safety (HES) in Garda Sikring (“Garda”). It is intended to be the necessary practical information, and guidance for all employees who participate in Garda’s projects.

The HES Manual is based on applicable laws and regulations, with some exceptions where the companies’ internal regulations elaborate and specify. The HES Manual is part of the individual management systems of the Garda companies. In the HES Manual the emphasis is on providing concise and specific information. For more complete and detailed information turn to local systems, e.g. specific HES-/project-/safety plans developed for each project, where also further requirements from customers might be included. The local adjusted systems and plans have priority.

2.2 Garda’s HES Objectives

- * Work assignments should be planned and implemented based on a fundamental understanding and acceptance that damage to people, work environments, materials, and production should be avoided
- * Employees should have a behaviour that sets a good example and ensure positive attitudes towards health, safety and environment

- * All managers should be involved and visible in the health, environmental, and safety work
- * We must have high level of preparedness so that we can minimize damage and loss, if an accident still occurs

HES Key Indicators

M1: there will be no injuries in the production we are responsible for; Number of days absent due to injuries per year shall be zero.

M2: no employees shall have a sick leave caused by working conditions

M3: the total absence due to work related sickness shall be less than 3% of proper work time (including both long term and short term sick leave, both permanent and part-time employees)

M4: all accidents, near-accidents, and deviations should be recorded. Analysis and corrective/preventive actions are to be implemented within reasonable time period and the effect on the work and work safety are to be followed up.

These HES Key Indicators are as important as other goals and objectives in Garda. We believe that all work can be performed safely and that everyone should take care of their own and their colleagues' health, as well as tomorrow's environment.

2.3 STRATEGY

In order to achieve the HES goals, we must have:

- * active participation from the Management of health, environment and safety
- * focus on safe operation in the workplace area based on distinct responsibilities, knowledge and understanding
- * implementation of targeted education in health, environment and safety work

- * systematic safeguard inspections under which we wish to learn from our weaknesses across the organization
- * reporting of adverse incidents where the emphasis is placed on finding the cause of accidents, near-accidents and deviations in order to prevent recurrence

2.4 ORGANIZATION AND MANAGEMENT

2.4.1 MANAGEMENT

The top manager has, according to Labour Act, the employer responsibility for the company. Accordingly, the top managers of the Garda companies are responsible for all activities of the companies, including HES.

The Labour Act requires the employer to ensure that activities are aligned and maintained, and that work is planned, organized and conducted in accordance with provisions laid down in the Labour Act.

2.4.2 Project Manager/Supervisor

Responsibility for the implementation of a project is delegated to the project manager or supervisor. Project Manager/Supervisor has the technical, economic and security responsibilities for the implementation.

Project Manager/Supervisor is to participate in the safeguard inspections.

2.4.3 SAFETY EXECUTIVE

At some larger projects it is appropriate to appoint a Safety Executive responsible for monitoring safety systems. A Safety Executive presence does not relieve Project Manager/Supervisor/Manager their responsibility for HES.

2.4.4 EMPLOYEES WITH MANAGEMENT RESPONSIBILITIES

Employees, who are tasked to guide or supervise other workers, shall ensure that the interests of safety and health are taken care of during planning and execution of tasks within their area of responsibility.

This point applies to supervisors, operations managers, and others who are assigned Management responsibilities.

2.4.5 EMPLOYEE DUTIES

Labour Act, all chapters 2-3-4-5-6 apply, generally to all employees.

It is established that the employee is obliged to follow the policies and orders. And the employee will contribute to creating the security and wellbeing in the workplace.

The employee is obliged to notify the employer of errors and omissions that may result in danger to life and health, cf. the Incident Form. The employee shall, if required, interrupt work to secure conditions.

The employee will perform work in accordance with instructions from supervisor or from the Labour Inspection. They should use prescribed protective equipment, exercise caution and otherwise contribute to preventing accidents. Minimum requirements regarding safety equipment in the member companies are described in this manual, specifically in Section 3.4. Nonconformity to the safety plans are treated according to Section 3.10.



2.4.6 SAFETY REPRESENTATIVE

The Safety Representative shall safeguard the interests of employees in matters concerning the working environment. The Safety Representative shall ensure that the work is done in such manner that concern for worker safety, health, and that welfare is safeguarded in accordance to the Labour Act.

The Labour Act describes the Safety Representatives duties and right to stop dangerous work. The projects should have a sufficient number of Safety Representative's to ensure that all areas and shifts have someone available at any time. In cases where there are multiple Safety Representative's on the same project, there shall be elected a senior for the project. The senior is elected by the employees.

If the Safety Representative is familiar with conditions that can lead to accidents or health hazards, safety representative shall immediately notify the employees on site, and construction site Management/Work-/Project Manager should be made aware of the relations if the Safety Representative is unable to avert the danger.

Remember: The Safety Representative is elected to represent you and your interests!

2.4.7 SAFETY INSPECTIONS

Safeguard inspections are implemented according to plan/procedure. Frequency and extent vary with the function/project risk and complexity, for example. Pursuant to the Safe Job Analysis, cf. Section 3.7

The Management and the Safety Representatives normally carry out Safeguard inspections together. In projects the Project Manager would normally join.

Line Management is responsible for considering possible actions and implements the most appropriate action within a reasonable time, and following up that implemented actions work.

2.4.8 HES AUDIT

Management Review and HES Audits are performed yearly, emphasizing the use and functionality of the system, as well as the system for handling disconformities and reported incidents. When required disconformities and incidents result in action plans.

2.4.9 PROTECTIVE AND HEALTH PERSONNEL

Company Health Service (CHS) is organized by each member company being member of an external occupational health organization. CHS will primarily work on preventive health, safety and environmental work. This is done by CHS performing evaluations, and possibly participating in safety inspections, holding courses and other training, making measurements of environmental impacts, etc. In addition, health checks to monitor the health of the individual employees are performed. You yourself make the appointment with CHS, whether it's for occupational or other ailments. If symptoms are not linked to your employment, your first appointment is still free of charge.

2.5 STAFF

Personal Liability for employees lies in the Line Management. Project Manager has the practical responsibility, and shall ensure that each employee is treated and taken care of in a proper and just manner.

2.5.1 ILLNESS

If you cannot attend work because of illness, you have to notify your manager prior to the first day of absence. If you do not you may lose your right to pay. For absence up to the max of 3 days due to illness, you can use a self-certificate form which must be completed and signed first thing your back at work. Self-certificate forms are normally located with your manager.

If you have 4 or more self-certified sick leaves during the last 12 months, you may be deprived of the right to use a self-certificate

form, and it will require a doctor's certificate for you to receive sickness benefits. The right to sickness benefits based on a self-certificate form is only accepted after 2 months of employment.

2.5.2 SHORT WELFARE LEAVE

If an errand cannot be done outside working hours, you can get off work under the agreement with Project Manager/Supervisor or your employment contract.

Project Manager/Supervisor can provide more information if needed.

2.5.3 LEAVE OF ABSENCE RULES

Leave of absence may occur when you are temporarily freed from work obligations. Leave of absence must be objectively motivated, e.g. lack of work, no materials or other obstructions that prevent work from being possible, e.g. frost, flood, fire.

Warning deadline is at present 14 days. Leave of absence warning shall set the date and the anticipated length of the absence. In the case of absence the employer is obliged to discuss the matter with the Safety Representative

Project Manager/Line Manager can provide more information if needed.

2.5.4 OCCUPATIONAL ACCIDENT INSURANCE

We have a compulsory Occupational Injury Insurance in Garda.

The Occupational Injury Insurance ensures the employee full compensation if the employee is suffering from an occupational illness or injury, without regard to fault. If the accident is caused by negligence, the compensation might not be supported, either in whole or partly.

3. HES - REQUIREMENTS

3.1 SAFETY TRAINING

Garda will only use qualified employees. Each department/function will ensure that employees have received necessary training in accordance with applicable regulations. If you have documented training, you should disclose this to your line manager. If you are set to tasks which you don't have sufficient qualification for, you must notify the Project Manager/Supervisor.

3.2 PROTECTION OF ENVIRONMENTS

Construction activities affect the environment in terms of noise, dust, vibration, and, not less, our presence intervenes directly with the local environment.

- * Show respect and follow local traffic and parking regulations
- * Keep the project area clean and free of rubbish
- * Be careful with the vegetation in and around the site.

3.3 ORDER AND CLEANING

A construction site is up to standards when there is nothing unnecessary there, and when everything necessary is located at their given place.

Order will help to:

- * Prevent accidents and injuries
- * Prevent (or limit) fire
- * Provide a pleasant, secure, and efficient workplace

You should keep your workspace clean and tidy;

- * Purge is part of the work
- * All materials and all tools should be cleaned and put back in place after use

Sort waste for recycling or for transportation to the landfill, according to the construction site/project plan for waste management.

3.4 PROTECTIVE EQUIPMENT

Personal protective equipment is not an adequate substitute for other protective actions, and should not be construed as a permanent solution to a HES problem. Personal protective equipment will, however, as well as other preventive actions and extra protection, prove necessary in many situations. The following commands and regulations explain the use of the protective equipment;

- * **Protective helmet and safety shoes** (with nails) are mandatory equipment, and should always be used.
- * **Featured clothing** with reflectors is to be worn.
- * **Hearing protection** is mandatory in a noisy site, such as when using an angle grinder. As a rule of thumb, you should use hearing protection if you cannot understand a normal conversation at 1 meter distance.
- * **Safety glasses** should be used when there is a risk for splash in the eye, e.g. when using an angle grinder, saw, mortar/cement work, etc. To prevent welding flash you must use dark glass. Be aware that welding/cutting develops powerful UV rays and tiny particles, which over time damage the eyes. Everyday glasses are not eye protection! If you rely on ordinary glasses, there are safety glasses that go on top of them. Another option is to use large plastic glasses that covers and protects the internal glasses.
- * **Gloves** should be used when working with oil products and chemicals to protect your hands against disease and injury as eczema, burns and wounds. There are special gloves when working with concrete, oil, acid, and welding operations, etc.
- * **Respiratory protection** should be used where there is dust and/or toxic gas in the air you breathe.

In general there are three types of filters for respiratory protection:

1. Dust filters for dust particles
2. Gas filters for gas and steam
3. combination filters

A dust filter is not a gas filter. A gas filter is not a dust filter!

* **Safety harness** should be used when working at height.

Other protective equipment such as **lifejackets, headlamp**, etc. shall be used where the nature of the work requires this. There may be various local orders for the use of personal protective equipment.

You should not start working without wearing the necessary/required protective equipment. If you are in doubt about what kind of equipment to be used, consult with Project Manager/Supervisor.

Required safety equipment is found either on the project or provided through the employer. All employees are obliged to maintain their personal protective equipment. If damage or deterioration occurs to the equipment, it shall be replaced.

3.5 HAZARDOUS SUBSTANCES

In order to prevent accidents and injuries that may occur when handling chemicals, there shall be safety data sheets available where the product is used. The Project Organization will also have a card file with the HES leaflets of all chemicals and products used in the project.

Chemical products also include everyday products such as gasoline, diesel, cement, paint etc.

HES leaflets give you information about:

- * Product name and product description
- * Directions for use
- * The quantity of toxic and hazardous substances
- * Description of health dangers
- * First aid if an accident happens
- * Preventive protective actions, e.g. for occupational hygiene ventilation needs
- * Fire technical information

Read the HES leaflets carefully before commencing work!

All chemicals should as a rule be kept in original packaging. If it is still necessary for the discharge of chemicals into other containers, these must be labeled similar to the original packaging. If you find chemicals without safety data sheets and/or without labeling, you are obliged to notify your Project Manager/Supervisor.

3.6 SAFE JOB ANALYSIS (SJA)

Safe Job Analysis (SJA) is carried out in advance of a work operation, cf. SJA form. All risks in connection with the performance of work are identified and the appropriate preventive actions taken, so that the work can be carried out in the most appropriate way. Through participation in a SJA you are made aware of your responsibilities and the risks associated with these. SJA will be conducted for new and unknown operations, operations with high risk potential, complicated lifting operations and assembly work, work operations with a low recurrence rate, working with pressurized systems, and for work with particularly hazardous chemicals.

When performing a SJA, the work is described and the work operations are broken down into subtasks, potential risk factors for each subtask are identified, safety and security actions are discussed and described. Actions described in a SJA report are followed up throughout the project. You work preventively when

you suggest that a SJA should be completed before the start of a job operation which you believe needs it. A thorough SJA will, through detailed planning, take away or reduce risk and increase productivity.

Participants in the preparation of the SJA are Line Management, Project Manager, Project Safety Representative, as well as skilled workers to carry out the work operation.

Before the work is undertaken, all personnel involved shall review the completed SJA, so that everyone knows their role and the work order as required.

3.7 CABLE ROUTING

Before installation begins, you must make sure that the work will not interfere with the cable route, underground gas tanks, etc.

- * Ensure that no maps are outdated
- * Mark cable routes with a different colour than the fence line, cf. Project/Safety Plan
- * If the fence line must be deviated, double check the cable route
- * If needed, apply a cable detector

3.8 ALCOHOL, DRUGS ETC.

Employees affected by drugs, alcohol etc. at work are a danger to themselves and their surroundings.

There is therefore forbidden to be under the influence of alcohol, drugs and/or sedative medicines in the workplace. Any suspicion of use of such will immediately result in expulsion from the workplace, and a written warning. Repetition will result in termination of employment. It's misguided loyalty to cover for a colleague who has a substance problem. For those who have such a problem it is important to get help as soon as possible.

3.9 NONCONFORMITY WITH SECURITY REGULATIONS

If you violate safety requirements laid down in laws, regulations, instructions, including this personal HES Manual, or regulations issued by Project Management the following response pattern will follow:

- * At the initial nonconformity of security you will get an oral warning. This shall be confirmed in writing, stating that the warning was given orally. The employee shall confirm that the warning has been received by signature. If the initial nonconformity is serious, you can get an immediate dismissal.
- * For repeated violations you are summoned to a conversation, where safety rules are reviewed again and you will get information about the consequences of further violations. The conversation will be documented and both parties shall sign the document. If you like, Project Manager/Supervisor/Safety representative can be present during the conversation.

Further violations will result in termination of the work relation!

4. SAFETY RULES

4.1 WE WORK SAFER - TOGETHER

The most common cause of work accidents are dangerous conditions and dangerous actions.

In this Safety Manual, and in HES/Project/Safety plans, you will find a variety of procedures and instructions that describe the action and responsibility in performing various tasks. These are also available on the Project Site

Equipment and other devices that are needed to protect you or other users, should under no circumstances be removed without an adequate replacement.

Many activities will not be particularly described in the procedures or reviewed by a Safe Job Analysis (SJA). It is therefore important that you continuously assess risk in the work being carried out, and that the work be stopped if you think the risk is unacceptable.

4.2 MORTAR AND CONCRETE WORK

Fresh mortar and concrete contains cement mixed with water. The wet cement may cause you allergic reactions and burn the skin and eyes.

- * You shall use gloves and eye protection
- * Plan ahead so there is little spillage on work clothes and skin
- * Wash away the mortar/concrete with clean water
- * Eye rinsing water/cup is found in the first aid kit.
- * Use moisturizer on your hands several times a day if you have a tendency to get dry skin or eczema

4.3 EPOXY

Epoxy products contain two main components: the resin and hardener. Some products contain solvents. The products are usually delivered as two component systems which you mix shortly before use. Some products come pre-mixed.

NOTE! The order you mix the components is crucial. Error may cause fire and explosion.

The degree of risk to health depends on the product's composition. In general the following applies;

- * Use suitable protective clothing, gloves and eye/face protection
- * Epoxy is dangerous through inhalation, ingestion and skin contact
- * If you get the drug in your eyes, rinse immediately with plenty of water and seek medical advice
- * Ensure good ventilation, use any suitable respiratory equipment

4.4 WORK AT HEIGHT, SCAFFOLDING AND LADDERS

When working at height where there are danger for falling, safety harness must be used. This shall be documented in a SJA prior to initiating work.

NOTE! Garda companies rules for the use of ladders, stepladders, work trestles, rolling scaffolds, and work on landings are stricter than the general regulations.



A) SCAFFOLDING

Installation, expansion, alteration and dismantling of scaffolding are to be carried out by personnel who have undergone both theoretical and practical training.

- * Scaffolding will be checked, approved and marked with green mark prior to use
- * Scaffolding which is under construction or for other reasons are unusable shall be marked with special signs and cordoned off. Before the scaffolding again be used, it shall be checked and reapproved
- * Scaffolds and working platforms 1 meter above ground shall have handrails
- * When moving a scaffolding nothing is to be standing on the platform, neither people nor objects

B) LADDERS

- * Ladders should only be used as means of access and not as work platforms
- * The ladder should always be secured on the top and/or footer
- * Ladder used as access to the roof or ledge, shall protrude at least 1 m above the roof or ledge
- * Detached ladder above 5 meters should not be used

4.5 SAWS

Saws have led to many accidents normally hurting fingers and hands, and splashes of tile or hard metal bits from the blade. The saw also produces high frequency noise.

- * You must wear eye and ear protection
- * Saws can be used only when you have received the necessary training and are over 18 years of age
- * Consider safety and quality to perform the task. Choose the right saw and blades
- * Make sure the saw is mounted securely so that it is stable
- * Ensure the area around the saw isn't slippery

- * Never leave the saw until the blade has stopped, and sunk to the lowest level
- * Never leave the saw without having cut the voltage
- * Always keep it clean around the saw

Do not remove swarf and debries when the saw is operative.

4.6 Nail Gun

Technical defects or irresponsible use and storage of nail guns and accessories can lead to serious accidents. When used the gun produce noise that might hurt your hearing.

- * You must wear eye and ear protection
- * Nail guns should not be used if series of shots are possible. There should be a trigger for each shot
- * Do not point the gun at yourself or others
- * Make sure your gun gets regular maintenance and lubrication
- * Ensure the use of nail sizes and types to suit both the gun and the work to be performed
- * Keep it clean around the workplace

4.7 BLASTING WORK

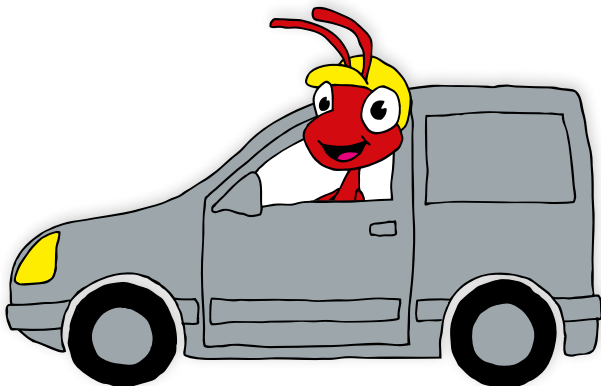
When you are at a blasting site, be sure to be informed about all work and security procedures which apply.

Normal notification procedure:

- * Short bursts of the siren of one minute duration before blasting
- * Blasting
- * A long sound of the siren informs that the danger is over

In addition to notifying the Project Manager/Supervisor is also responsible for evacuating and the deployment of guards before the blast.

Electric lighters shall not normally be used for blasting.



4.8 TRANSPORT

When transporting normal traffic rules are to be followed.

- * You must wear the safety belt
- * You must secure the cargo properly
- * Observe speed limits
- * Adjust speed according to driving conditions
- * Show care when passing traffic
- * Ensure that the loading plans etc. are in the lower position before the drive begins

4.9 WORK IN DITCH

Ditches and slopes are associated with danger. Working in the trenches should be conducted in accordance with the requirements provided in the local Regulations for execution of work, Chapter 21. Digging.

- * For trenches and shafts that are deeper than 2 meters the sides shall be given a proper angle/slope or otherwise secured against landslide
- * Place digging masses so that they cannot cause landslide, and not closer than 1 meter from the pit or trench edge

- * In trenches that are deeper than 1 meter, you should always have one or more escape routes
- * When you leave the site, you must put up barriers or other appropriate barring if there is a risk that you or others may fall into the ditch/pit
- * By digging in or near busy road, you must be especially careful

4.10 HEAVY LIFTING

Use muscles in the legs and stomach when lifting. Bend your knees and keep your body upright when you start lifting. Lift the object closest possible body. Keeping the object close to you reduces a lot of pressure on the spine.

When heavy or difficult lifting be always two together or use lifting equipment.

4.11 LIFTING TOOLS

Lifting equipment should be checked every year.

- * Defective lifting gear shall be marked with white color and be removed from the site immediately
- * Approved lifting gear should have a tag with a certificate number and the accepted workload
- * Lifting equipment that is peeling, rusty, have nodules or show other signs of careless use shall be disposed
- * Before the lifting of people in the crane basket, see Regulations on Execution of work, Chapter 17. Working at height.

4.12 SLINGERS

- * Check lifting equipment visually before use (firmness and quality)
- * When lifting long objects, use two straps and possibly a separate rope
- * Please be aware that changes in temperature in winter can cause icing and danger of sliding
- * Check the balance of what you have strapped when the load is lifted off the ground.

- * Keep away from hanging equipment
- * When transport of bulk cargo use a certified cashier
- * When using the radio you should declare who you are and be clear on who you want to talk to
- * Be brief and concise in your message. If something can be unclear, ask for confirmation that the message is understood
- * When a sudden need to cancel a lift operation, repeat «Stop!» three times: “Stop–Stop–Stop!”
- * Provide clear and appropriate signals by routing of cargo. Agree in advance with the operator how signaling will be performed. The most commonly used hand signals are illustrated behind in the HES Manual

4.13 HOT WORK

Hot work should only be performed by personnel with a valid certificate. When welding, use of the grinder, cutting burning, or other similar task which emits an open flame, heat or sparks, it is especially important that you follow safety rules. Be especially careful when there is hot work done in a building where there's ongoing interior work;

- * You must wear eye protection, gloves, and any flame-retardant clothing
- * People should not stay in the splash zone
- * Finished surfaces and combustible materials must be covered
- * Fire extinguisher shall be on or in the immediate vicinity of the equipment
- * Fireguard should be present in the workplace. The guard will, when required, stay for at least 1/2 hours after the work is completed

4.14 NOISE

The projects shall actively perform actions to minimize the noise in scope and quantity. Noise sources which get special attention, are noise from radios, machinery, tunnel fans, pumps, and especially noise impact activities such as sheet piling, hammering,

pigging, drilling, tapping, loading, transportation, etc. Noise charged work in the building will be conducted in isolated rooms.

Use of mass media (e.g. radio, mobile, ipod):

Indoors, in an enclosed construction site, or where it can be a nuisance to others, it is not allowed to use a noisy mass media.

Use of mobile phone:

For all meetings held it is not permitted to bring a mobile/-cellular phone, if it is not completely offline. The meeting chairman may grant dispensation from this rule if there are emergency preparedness concerns. Use of mobile phones in other situations shall be exercised with respect to security, good communication with colleagues, the necessary concentration, and not be a nuisance to others. There might be local rules for use of mobile phones which shall be honoured.

**4.15
DUST**

When dust issues occur actions shall be carried out to reduce dust problems for ourselves and others. An appropriate action can be regularly watering and the use of dust-binding agents on fixed routes.

**4.16
CLEAN CONSTRUCTION SITE**

The Clean Construction Site concept is mainly to improve your and my working environment during production. Even if a building/area of delivery has appeared as clean and dust-free, then in many cases the air conditioning system transported the dust for several months after delivery and creates a bad working environment.



With a little extra effort, we will improve our working environment, and building/site will appear at the handover as a “healthy” building / area.

In short, we can begin by:

- * Keep it clean and demand the same of our colleagues
- * Avoid the temporary storage of waste
- * Sort the waste in bags or containers for recycling
- * Perform the dust-producing work in the open air. If you need to be inside, point out a central space and provide sufficient mechanical exhaust from equipment and out in the open
- * Wiping our feet before entering the building

4.17 WASTE MANAGEMENT/RECYCLING

Waste must be handled so that it is the least possible damage and inconvenience. Sort waste for recycling according to the project/work plan for waste disposal. Ensure stability and compaction in containers, as this reduces the number of fills.

It should be taken special precautions to prevent spills of chemicals, fuels and oil products. Hazardous waste will be collected at the designated place for disposal.

4.18 HANDLING OF GAS

Using gas requires knowledge, care, and respect. In inexperienced hands gas can be dangerous. With respect to safety, it is important for you to know:

- * That you have the correct gas for the purpose; wrong gas can result in considerable danger
- * If the gas is lighter or heavier than air: heavy gases sink down to the floor and to the low-lying areas
- * Whether the gas is flammable or toxic
- * If there is danger of suffocation, increased risk of fire or explosion when leakage
- * If the equipment is in order and you know how to use it

4.19 WORK ON OR NEAR THE ROAD

When working on or near the road we follow guidelines for working on or near the road. This includes using visibility clothes class 2.

4.20 WORK IN OR NEAR THE RAIL TRACK

When working in or alongside the track we follow guidelines for working in or alongside tracks, including following orders from the main security guard, local security guard and manager of EL-security.



Protective Vest,
main security guard

Protective Vest,
manager EL security



Combination Vest

4.21. WORK WITH HIGH VOLTAGE

When working with high voltage extra caution shall be ensured. Everybody shall have participated in the required safety courses and use the required safety equipment.

4.22 BEHAVIOR

Most accidents are due to a fall to a lower height or the same.

Move calmly. Do not RUN or JUMP!

5. EMERGENCY, ACCIDENTS, NEAR-ACCIDENTS, DEVIATION

5.1 EMERGENCY

Emergency plans are prepared for each Garda company. The plan includes instructions for notification and descriptions of who does what in relation to accidents.

In every project employees shall have undergone training in first aid. Sufficient emergency equipment shall be available and easily accessible.

The following equipment should be available at all facilities/ physical locations;

- * First Aid kit to treat minor injuries
- * Stretcher (when possible) and First Aid kit in case of more serious injuries
- * Fire Extinguisher

If you use any of this equipment, it is important that you notify the Project Manager/Supervisor/Safety Representative, so that new equipment is acquired.

NOTE! It is important that you get to know the emergency arrangements for your work place. Thereby you are well prepared in case something should happen.

5.2 GENERAL ACTION PLANS

Below are the general remedial actions listed. As a general rule all used emergency resources, such as First Aid equipment and

Fire Extinguisher shall be replaced as soon as possible after the incident is under control.

Contact your manager when in need of new emergency equipment.

5.2.1 SEVERE PERSONAL INJURIES

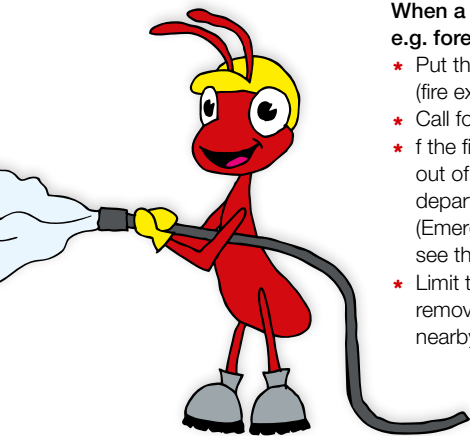
Serious, maybe even life threatening, injuries.

If you are the first person to arrive at the scene of an accident:

- * Secure the site to prevent further damage
- * Get an overview of the situation
- * Provide lifesaving first aid
- * Call for assistance (Emergency number: see the last page)
- * Meet the ambulance at the agreed location, clear space for a helicopter

5.2.2 FIRE

If you notice something is on fire, you must take responsibility and take the appropriate action. The actions will depend on what is burning.



When a fire in the wild:

e.g. forest or grass fire;

- * Put the fire out if possible (fire extinguisher, water, etc.)
- * Call for help
- * If the fire is, or can get out of control, call the fire department immediately (Emergency number: see the last page)
- * Limit the fire's development; remove flammable items nearby

- * Make sure everyone is notified, and if necessary, evacuated
- * Meet with the fire truck at the agreed location

When there is a fire in or around gas containers, polystyrene or other materials that develop gas;

- * Get an overview of the situation
- * Call the Fire Department (Emergency: see last page)
- * Evacuate the area

If the fire is indoor;

- * Close doors and windows
- * Extinguish the fire if possible
- * Make sure everyone is notified and evacuated
- * Call for help and order that someone contacts the Fire Department
- * Try to limit the fire development
- * Meet with the fire truck at the agreed location

Fire/smoke inside a tunnel;

- * Notify and call for help if necessary
- * Wear breathing apparatus when needed
- * Stop the fire/the source of the smoke if possible
- * Make sure everyone is evacuated

5.2.3 ACUTE POLLUTION

To limit the damage in the ground, when emissions of oil, diesel, etc., you must:

- * Stop the leak if possible
- * Plant absorbent materials to limit pollution
- * Notify Project Manager/Supervisor
- * Get rid of contaminated soil
- * Treat the mass as hazardous waste

5.3 EXTERNAL NOTIFICATION OF ACCIDENTS

An external notification is the immediate message spoken to emergency services, police or fire department when an incident has occurred.

It is important to stay calm and restrained at the scene to avoid panic or confusion. If you are the one notifying about an accident, be sure to provide:

- * Who you are
- * The telephone number you are calling from
- * Where it happened
- * What has happened
- * When it happened
- * Who else are notified

Conclude with question to ensure that the message is understood.

5.4 INFORMATION ABOUT ACCIDENTS

In connection with serious accidents, you are not to speak openly about what has taken place to spectators. Only the rescue crew/ police arriving at a scene should get the information concerning the accident. All questions from family members or the press in connection with an accident shall be referred to Project Manager/ Supervisor/Police.

5.5 REPORTING OF ACCIDENTS, NEAR-ACCIDENTS, DEVIATIONS

Everyone is responsible to report accidents, near-accidents and deviations to the closest manager. The Incident Form, which follows the HES Manual, is located at your facility and is to be filled in.

Incident Form includes the following types of events;

Accident:

an undesirable event that results in injury to persons, material or environment, or that leads to production losses.

Near-Accidents:

an unfortunate incident which under slightly different circumstances could have resulted in injury to people, material, the environment or production.

- Deviation:** Deviations/defects at the workplace, e.g. the equipment, deviations from procedures and routines, etc.
- Improvement Proposals:** Suggestions on ways to improve the work situation.

When you report an incident, and suggest what should be done, the responsibility is handed over to the management to make sure that the incident is analyzed and also see through that the appropriate actions are implemented within a reasonable time. This is to create a more safe work environment. Your effort will help reduce the risk of accidents happening to not only you, but also your colleagues. All reported incidents, and suggestions will be handled and completed by the Management or HES manager.

- * Report what happened on the Incident form attached to the HES manual and which can also be found in your facility
- * Make a note of what actions, if any, that were made immediately
- * Feel free to suggest what may also be done to prevent recurrence
- * Deliver form as quickly as possible to Project Manager/ Supervisor/Safety Representative or the person mentioned in the safety plan
- * If filling in the Incident Form is impractical to carry out, the report can be orally given to the Project Manager/Supervisor.

On the basis of reported incidents, reports are prepared. It is important that all parties contribute with what they know, so the cause can be determined. The report will be available when all the facts concerning the incident are known and all research is carried out.

Project Manager/Supervisor is responsible to see through that the report is completed. The report is a tool to prevent similar events occurring again.

There is line responsibility that the reports are followed in relation to cause and loss potential.

Accidents involving personal injury shall always, regardless of whether the injury is big or small, be reported to NAV, on NAV's occupational injury form.

5.6 ALL ACCIDENTS CAN BE AVOIDED

The best way to avoid accidents is to eliminate the causes.

We all have to jointly prevent accidents by:

- * taking responsibility for our own safety
- * taking responsibility for our work colleagues' safety
- * taking responsibility to create and protect a good working environment
- * taking care of the environments

You can contribute to this by:

- * assisting in the implementation of the actions implemented in order to create a healthy and safe working environment
- * actively participating in the organized HES work
- * performing your tasks in accordance with the orders and instructions
- * wearing personal protective equipment such as shoes, helmet, ear protection, eye protection, etc.
- * displaying care and otherwise contributing to the prevention of accidents and improved health
- * worrying when you see co-workers expose themselves to unnecessary risk and danger
- * avoid negative impact on the environments
- * taking responsibility and showing responsibility

Accidents just don't happen – they are caused!

6. FIRST AID

There is normally a certain amount of time from when the injury occurs till qualified personnel arrive and treat it. During this period it is important that the injured person gets help.

Good first aid can:

- * Save lives
- * Limit the damage
- * Relieve pain

6.1 TAKE THE LEAD!

If you are the first to arrive at the scene, provide first aid. It is important that you immediately form a picture of the situation. The type of accident often provides an indication of what damage may have occurred.

You shall remain calm, specific, and give tasks to the others who come to help;

- * Ensure the scene to prevent further damage to occur
- * Get an overview of the situation
- * Provide life-saving first aid
- * Call for assistance (Emergency number: see the last page)
- * Organize the first aid
- * Distribute tasks, give direct and simple orders
- * Meet the ambulance at the agreed location or clear space for helicopter

6.1.1 SECURE THE ACCIDENT SITE, AND THE INJURED

Secure the surrounding area, the person or people injured, and yourself;

When traffic accidents:

- * Set up a warning triangle, and turn on alarm lights
- * Turn off the lights and ignition
- * Ensure that the vehicles do not tip over or slide, e.g. use spare tire, jack, etc.

**NOTE: if there is possible neck or spinal injuries, the injured person is to be moved as little as possible, and be careful. If the injured is in the road, the traffic must be stopped.*

- * Prepare Fire Extinguisher
- * If fire and explosion hazards: move the injured to safety
- * Keep prying people away, so you'll prevent more people getting involved in the accident

6.1.2 PROVIDE LIFE-SAVING FIRST AID

- * Ensure that the injured person is breathing, and that the person does not have any blocked airways.
- * Stop the bleeding
- * Choose the proper position
- * Start the resuscitation of the unconscious not breathing

6.1.3 WHAT IS CONSCIOUSNESS?

When you are unconscious the brain is unable to react normally.

The reason may be:

- * Insufficient blood supply to the brain
- * Too low oxygen content in blood
- * Too little sugar substance (glucose) in the blood
- * Toxins in the blood (poisoning)
- * Too high or low body temperature

6.2 EXAMINE THE INJURED

- * Touch
- * Observe
- * Communicate

TRY TO MAKE CONTACT

- * Try to wake the person by shaking the shoulders gently and shout “Are you awake?!”
- * If the person wakes up, examine the injuries
- * If the person does not respond, the person is unconscious, check breathing
- * Ask someone else to call for assistance (emergency number: see the last page)

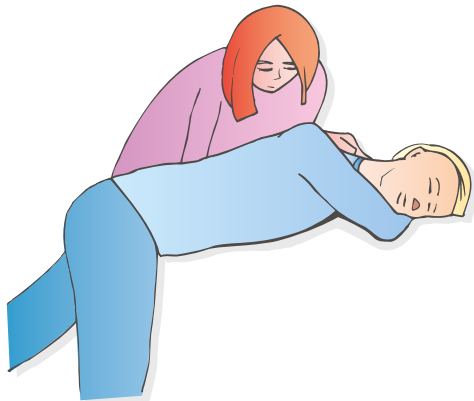
EXAMINE

- * Check if the person is conscious by talking to them, or by check reaction to pain (e.g. Pinch arm)
- * Look at the skin; When the blood circulation is failing the skin is cool, clammy, pale, and cold sweating
- * Check for external damage, e.g. bleeding or signs of broken bones. Often it may be needed to remove clothing to get an overview; When possible broken bones, cut the person free of the clothes, look for blood beneath the hurt one
- * Examine the injured carefully

CHECK FOR BREATHING

- * Clear the airway, remove visible obstacles (dentures, vomit, blood); lift the lower jaw forward with two fingers under the chin, if it is NOT a possible neck injury, the head will gently bend backwards by putting one hand on forehead
- * Keep your cheek/ear close to the person’s mouth and nose; Listen and feel for breathing
- * See if the chest raises and lowers

6.3 FIRST AID TO UNCONSCIOUS PERSONS WHO IS BREATHING



When possible neck or spinal damage, the injured person should be moved as little as possible;

- * Turn the person over to the (least injured) side, while you hold the head and neck, the upper leg knee can be pulled forward, so the injured person does not tip over onto the belly
- * Tilt the head slightly backwards to secure clear airways, place the mouth low e.g. with the upper hand under the lower cheek
- * Remove blood and vomit from the mouth area
- * Always ensure that the injured is still breathing

6.4 FIRST AID TO UNCONSCIOUS PERSONS WHO IS SITTING

A person who sits with his head forward probably has blocked airways, the person may be choking. Consider the possibility of neck injury. The head and neck should be moved as little as possible;

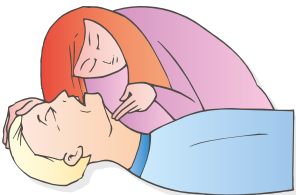
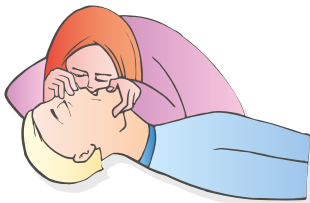
- * Lift the head up into the normal position, support the head and neck in this position, check whether the person is breathing
- * If the injured person wakes up, let the victim chose whether to sit or lie down.
- * If the injured person still does not breathe, you have to lay the injured down, and commence resuscitation

6.5 FIRST AID TO UNCONSCIOUS PERSONS WHO IS NOT BREATHING

Start resuscitation:

Mouth-to-mouth;

- * Call for assistance (Emergency number: see the last page)
- * Tilt the head gently backwards; Place a hand on the forehead and pinch the nostrils with two fingers, lift the lower jaw with your other hand's index and forefinger
- * Place your mouth over the mouth of the injured, blowing into the injured and make sure the chest rises; blow slowly and not too powerfully
- * Let the air flow out and check that the chest is lowered again
- * Do 2 blows before continuing with chest compression



6.6 CARDIAC COMPRESSION



- * Find the pressure point located on the lower half of the chest bone (sternum), a couple of finger widths from the tip
- * Place your wrist against the pressure point; Place your other hand directly on the first, lift your fingers from the chest; You should only push with your wrists.
- * Do 30 compressions at a rate of approximately 100 per minutes, i.e. the 30 compressions take about 18 seconds. During each compression the chest bone should be pushed down about 4-5 cm
- * Continue with 2 blows, then 30 compressions, etc.

So: 2-30-2-30-2-30-2...

NOTE: Continue with mouth to mouth and chest compression until medical staff can take over.

6.7 REVIVAL OF YOUNG CHILDREN

- * Cover the mouth and nose with your mouth
- * Blow gently a mouthful, 5 times, check that the chest raises and lowers

- * Compress 30 times on the sternum/chest with one hand, use two fingers on infants
- * Then: 2 blows, 30 chest compressions etc.
- * Spend approximately 18 seconds on the 30 compressions (i.e. a rate of about 100 compressions per minute)

So: 5-30-2-30-2-30-2...

NOTE: Continue with mouth to mouth and chest compression until medical staff can take over.

6.8 AWAKE PERSONS WITH MAJOR INJURIES

Internal bleeding is difficult to notice. The following symptoms might be signs of this:

- * pale, cold and clammy skin
- * fast and weak pulse
- * tight and aching stomach
- * rapid breathing
- * loss of consciousness

If unconscious:

- * lay the injured on the (least injured) side



If conscious/awake:

- * Laid flat with her feet high
- * Cover with clothing or blankets
- * **Do not** give the injured anything to drink
- * If chest injuries and difficulty of breathing, let the injured sit halfway upright

6.9 BLEEDING

Stop external bleeding!

- * Keep the bleeding part elevated
- * Press directly on the bleeding wound with a gauze etc; preferably use gloves when in contact with blood
- * Add a pressure dressing directly on the bleeding wound
- * If the bleeding is major, elevate the legs (to get more blood to the brain).

6.10 BURNS

If hair or clothes is/are burning, roll the person around on the ground, pref. in a blanket

- * Begin cooling immediately to prevent the heat from penetrating deeper into the tissue
- * When **minor burns**, cool the body part for 5 minutes with snow, cold water, or the coldest you can find; continue with lukewarm water (15-20 degrees) until the pain is gone
- * For **major burns**, cool down with lukewarm water (15-20 degrees), not longer than 15-20 minutes; Add wet, cold towels, etc. to the burned areas

- * For **major burns** or **burns on the face**, call for assistance (Emergency number: see the last page)

- * Do not remove clothing that is burned into skin
- * If you develop blisters, do not pierce
- * If blisters or wounds, cover with soft, sterile gauze, seek medical advice

- * When **fire after an explosion** e.g. heated air or gas, breathing difficulties might occur: call for assistance (Emergency number: see the first page)

6.11 **AUTOMATIC / EL**

When working with automation we are particularly attentive to electric shocks and collisions. Troubleshooting must always be preceded by disconnecting power. We always use licensed electricians to connect 220V.

7. GIVE AND RECEIVE SUPPORT

Give psychological support!

- * Be together with the injured person
- * Get down on your knees, and take the wounded by the hand
- * Explain what is happening and that help is on its way
- * ***It is not always necessary to speak everything you know***
- * Use a normal tone of voice
- * Be a good listener, and accept emotions
- * Keep prying away and keep trusted data for yourself

Ask for psychological support!

- * Talk of your reactions in retrospect
- * Both the experience in itself and the feeling of inadequacy can lead to stress

8. EMERGENCY PHONE NUMBERS



Give the correct message!
Speak calm and clear.

Who?

- * present yourself
- * give the phone number you are calling from
- * address and place you are calling from

What?

- * describe the situation, and when it happened
- * inform about serious injuries/illnesses
- * inform about possibly trapped people
- * tell if other people have been notified

Where?

- * specify the exact location

Make sure that the message is received

- * hold the line until you have received satisfactory confirmation
- * emergency operator will provide useful advice, e.g. regarding resuscitation

9. TERMS AND ABBREVIATIONS

AKAN	Labour expertise for substance abuse and addiction Problems
AML	Labour Act
BHF	Construction Client Regulations
BHT	Business Doctor Service
CHS	Company Health Services (= BHT)
HES	Health, Environments, Safety (= HMS)
HMS	See HES
IK	Regulations Work Environments
ISO 14001	Environmental Management Standard
ISO 9001	Quality Management Standard
IW	Inclusive workplace (A Norwegian Occupational Health Regulative)
mop	Environmental Follow-up Plan
NAV	Labour and welfare services
OHSAS 18001	Labour Working Standard
PSE	Personal Safety Equipment
QA	Quality Assurance
QHES	Quality, Health, Environments, Safety
RUH	Report Adverse Incident
SHA 8000	International ethical rules
SHA	Safety, Health, Labour
SHA-plan	Plan for the safe, healthy and labour reflected construction
SJA	Safe Job Analysis
VO	Safety Representative
YL-grupper	Occupational Ventilation Needs Grouping

10. SIGNS OF DANGER



FLAMMABLE



EXPLOSIVE



TOXIC



CORROSIVE
SUBSTANCES



IONIZING
RADIATION



HANGING LOAD



INDUSTRIAL
VEHICLES



DANGER:
ELECTRIC
POWER



ANOTHER
DANGER



LASER
RADIATION



OXIDIZING



RF
RADIATION



POWERFUL
MAGNETIC
FIELD



OBSTRUCTION



HEIGHT
DIFFERENCE



BIOLOGICAL
DANGER



LOW
TEMPERATURE



HARMFUL AND
IRRITATING
SUBSTANCES



GAS UNDER
PRESSURE



AREA WHERE
EXPLOSIVE
ATMOSPHERE
CAN BE
FORMED

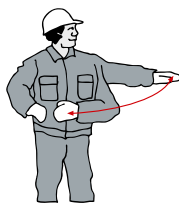
11. HAND SIGNALS



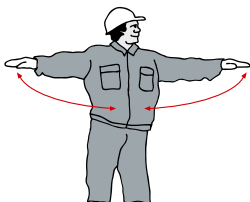
Down



Up



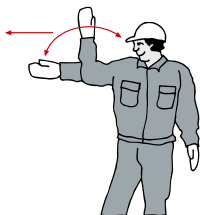
Stop



Full Stop



Full Stop



This Direction

To achieve our goals we will follow

Gara Sikrings values:

- * Well-being
- * Open-minded
- * Loyalty
- * Enthusiasm
- * Cooperation

