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Safety handbook
Reykjavik Energy

This safety handbook replaces the safety handbook from 2000/2007
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Prologue

This Safety handbook is created by a working group of The Federation of Icelandic Energy and Utilities (Samorka) and is intended to be a handbook about safety and safeguards for all the utilities within the federation.

The federation will publish the handbook solely in electronic format and can be found on the internet at www.samorka.is. Each member company receive an electronic edition, which can be modified or adjusted according to their circumstances.

Information can be found in the book about work practices pertaining to safety and the well being of employees of Reykjavik Energy during day to day work, health promotion, response to accidents and emergency response plans.

The material in this safety handbook is compiled from various sources, amongst others:

Landsnet, Landsvirkjun, Reykjavik Energy, Westfjords Power Company,

The State Electric Power Works, The Icelandic Red Cross, Administration of Occupational Safety and Health in Iceland and The Public Health Institute of Iceland.

Photography in the book is mostly from employees of Reykjavik Energy. Böðvar Leósson illustrated the diagrams about response to electrical accidents and the diagram about first aid is from the Icelandic Red Cross.

It is expected that the handbook will promote Reykjavik Energy's safety culture and the 'Workplace, health and safety act'.

WE ARE ASSERTIVE, SHOW INITIATIVE AND ARE OPEN TO INNOVATION

WE ARE FLEXIBLE AND ADAPT TO CHANGING CONDITIONS

INTRODUCTION

Today companies must comply with the 'workplace health and safety act' from 01.01.1981, (act nr. 46, 1980), and later changes and related regulations. The laws derive from an agreement between employers and the state, and were carried out in connection with wage contracts in 1977 and in agreement with the EEA. The law covering conditions, health, hygiene and safety at work applies to all sectors of land-based employment, where one or more individual is employed.
The objective of the law is to:

- „ Ensure safe and healthy working environment for all, which corresponds to the social and technical development in the society. "
- „ Ensure the ability within workplaces to handle problems concerning safety and health. To follow through with existing laws, regulations, instructions and consultation provided by the Administration of Occupational Safety and Health."

In the legislation there is an emphasis on the initiative of the employers and workers to define the objectives of the Administration of Occupational Safety and Health. Safety work and regulations within Reykjavik Energy aim to prevent accidents and health damage caused by work, and to encourage the general wellbeing of employees. The aim is also to promote a safe workplace, and that health and safety regulations are of the highest standard.

Amongst others, plans are devised for a healthy workplace and work risk evaluations are carried out with an emphasis on health and safety. Safety representatives from the company and employee elected safety stewards take part in three safety committees to carry out this work (Rule nr.920/2006).

The task of safety representatives is, as stipulated by law:

> „ Organize operations regarding the workplace, health and safety at the company, educate the employees in such matters and supervise workplaces, provide a safe working environment so that health and safety issues meet the desired standards.”

The work of safety manager and stewards is very important for each company. Good cooperation between the employees is the key to success. It is expected that this handbook will ensure that everyone goes home healthy at the end of each working day.

1 REYKJAVÍK ENERGY'S POLICY ON OCCUPATIONAL HEALTH AND SAFETY

It is the policy of Reykjavik Energy (RE) to ensure a safe and healthy working environment for all of its employees. Our goal is an accident-free workplace and that no employee will suffer damage to their health during their work for the company.

In order to achieve this goal, the company's management wants all its employees to strive for these common goals in accordance with this policy.

During operations the company will comply with all statutory and regulatory requirements, constantly endeavouring to increase the safety of its employees, co-operating parties and customers.

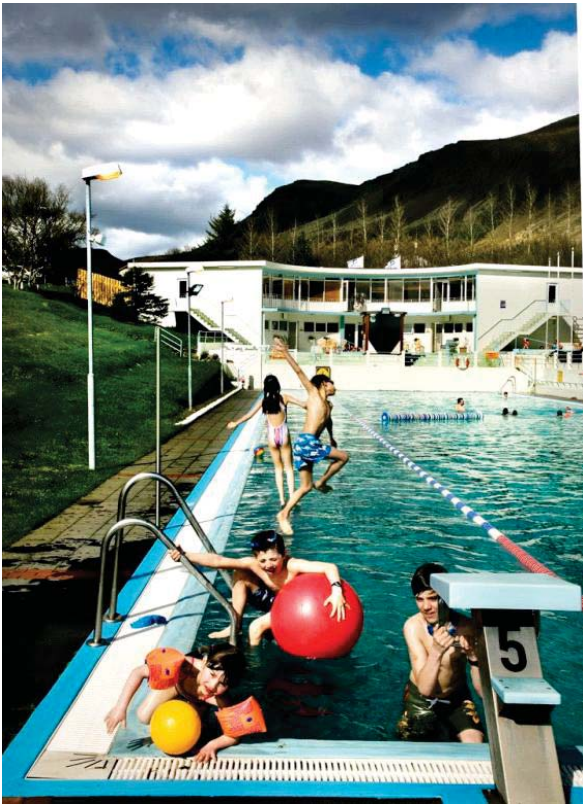
The means towards this goal are as follows:

Reykjavik Energy will:

- ensure for its employees, service providers and others doing business with the company, a safe and healthy working environment.
- provide its employees with facilities, tools and equipment in good condition that meet safety requirements.
- ensure that the company's equipment is regularly inspected and tested.
- instruct and train its employees on occupational health and safety.
- carry out risk analysis for the entire company and each time new equipment and/or new working practices are put to use that could pose a risk for the employees.
- provide information on the company's requirements on matters of safety and health in a systematic manner to its suppliers, customers and service providers.
- ensure the active participation of management in matters of safety and health.
- ensure that all its employees receive the necessary training for their individual jobs, providing written procedures and working instructions for its employees.
- carry out regular internal audits to ensure the efficacy of the system.

Reykjavik Energy Employees:

- shall be knowledgeable of and comply with the company's written safety regulations and the applicable rules on occupational health and safety to ensure the safety of people, equipment and the working environment.
- shall use the required safety equipment, protective clothing and personal protective equipment under all circumstances.
- shall participate in meetings on safety measures, courses and demonstrations regarding matters of safety and health.



The employees of Reykjavik Energy shall not be permitted to take on work without complying with safety regulations and using the appropriate protective equipment. If such safety equipment is not available, they shall stop working until the appropriate equipment is made available to them.

2 GENERAL SAFETY RULES

Amongst other things safety rules cover:

- Identifying possible dangers in each work area and prevent them
- The use of personal protection and safety equipment
- Conduct and behaviour in the workplace
- Work practices
- Emergency responses
- Employees have a responsibility to become familiar with the location and operation of safety equipment and current safety rules

WE HAVE RULES AND ORDER IN THE WORKPLACE AND WORK SYSTEMATICALLY

2.1 PERSONAL PROTECTION

During construction work and inspection the following are required:

- **Safety helmet**
- **Safety shoes/boots**
- **High visibility clothing**
- **Safety glasses**

The following personal protection may also be required:

- **Hearing protection.** Hearing protection shall always be used in noisy environments. There are several types depending on noise levels and frequency.
- **Protective clothing.** Employees should be dressed in clothing/vests that meet visibility standards, wear fire protective clothing and other suitable protection.
- **Respiratory equipment/masks.** Use appropriate respirators/masks when using substances that pose a danger if inhaled.
- **Safety ropes and lifelines.** Safety ropes and lifelines should always be used if there is danger of falling.
- **Safety goggles and face protection.** Safety goggles and face protection should always be used when working with machinery that could particles, sparks, splinters or there is a danger of facial injury.

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2.2 BREACH OF SAFETY RULES CONCERNING PERSONAL PROTECTION - SANCTIONS

- **First offence:** The employee will be issued with a written warning. The employee is allowed to continue working once the breach of rules has been addressed. The employees' manager should then be made aware of the warning.
- **Second offence:** The employee will be issued with a written warning and escorted off the worksite. The employee is allowed to begin work the following day if he has all the safety equipment and is correctly using it.
- **Third offence:** The employee will be escorted off the worksite and will be informed that he will no longer be permitted to work on Reykjavik Energy worksites. The site manager / onsite engineer / foreman should report the breach as quickly as possible.

Warnings remain effective for 12 months after the breach.

Those able to warn and escort employees off the Reykjavik Energy (RE) worksites include:

- RE supervisors working with contractors.
- RE foremen working with RE employees.
- Resident engineers.
- RE safety supervisors.
- RE project managers.
- RE safety committee members.
- RE safety managers.

Remind your co-workers to use personal protection suitable to each situation.

2.3 GENERAL SAFETY RULES

- Follow the most recent rules and instructions. If there is a problem seek the necessary information. Don't take any risks.
- Identify and provide against dangers that could arise in each work situation (risk analysis / risk assessment).
- Report, mishaps, dangerous situations and circumstances that could cause personal accidents and damage to structures, equipment or surroundings. Your experience could save others.
- Become familiar with the location of safety and emergency equipment in the workplace and ensure escape routes are unobstructed.
- Have fire extinguishers to hand and show extreme caution to fire and work that could be potentially flammable.
- Use appropriate personal protection and safety equipment.
- Keep the work environment clean and tidy. Work is not finished until cleaning and tidying up has been completed. Cleanliness and tidiness in the workplace are indispensable.

An improper approach can cause accidents.

- Take precautionary measures when using all tools and equipment.
- Use the correct equipment and tools and beware of safety features and be careful.
- Don't remove safety features or guards from machinery or equipment.
- Don't use, adjust or repair machinery or equipment except if you are experienced and have authority to do so.
- Never use machinery or equipment unless you have received the appropriate training and have permission to do so.
- Notify damage to machinery or equipment to the owner/equipment manager/foreman as quickly as possible.

IT IS BETTER TO HAVE A STEEL TOE THAN A BROKEN TOE

Failure to report mishaps can have dramatic consequences, both for those involved and also for others who don't anticipate the danger.

- Take machinery out of operation if you experience problems with its condition so that it will not be used by others. Upon disposal machinery should be made unusable.
- Follow the rules on marking worksites and make sure that road users are not in danger.
- Use speed bumps if the traffic needs to be slowed down.

- If you need to cut in on a job, don't do anything until you're sure the operator of the machinery is aware of your presence.
- If on call or shift work, request assistance if the situation requires it.
- When there will be a considerable amount of noise from the worksite, then the residents in the local area should be notified about possible disturbances before the work commences.
- Working hours should adhere to the following time limits about noise pollution (see table).

Threshold for noise due to construction			
Residential areas, their surroundings and where patients or care residents stay overnight			
Loud construction			
	Weekdays	Weekends / public holidays	Other days
Start construction	07:00	10:00	Not permitted
End construction	21:00	19:00	
Especially loud construction			
Start construction	07:00	Not permitted	
End construction	21:00		

- Avoid breathing in hazardous substances. Use an appropriate mask or respirator.
- Use safety steps or ladders with slip protection and cordon off the area.
- Use more secure equipment than ladders if necessary.
- You are only allowed to begin work on scaffolding if all points on the EBQ 357 checklist have been satisfied.
- Take care when erecting scaffolding and use only recognised techniques and equipment.
- Always have handrails on the scaffolding.
- When working at height, always mark the danger area underneath with cones and ribbons.
- Only use equipment recognised by the Administration of Occupational Safety and Health to lift persons.
- If you can feel a tickling sensation in your feet or bottom half of the body when approaching and electrical accident, it's likely that the electricity has not been disconnected. Stop immediately and turn back.
- Take care when working with an open door in windy weather; find a way to secure it.
- Don't leave a scene until another responsible party has taken over control of the area if there is:
    - An open manhole
    - An open street cabinet
    - Damaged cables
    - Unprotected running hot water
- Crude jokes or conduct, that offend or cause sentimental harm are not tolerated.

Persecution is not tolerated.

AN IMPROPER APPROACH CAN CAUSE ACCIDENTS

- Encourage employees to go home if they complain of a condition that could affect their competence in work.
- Don’t take children to a worksite or industrial area.
- Good teamwork, integrity, honesty and discussion of problems in the workplace contribute to a better work environment, wellbeing and a reduced risk of accidents. According to law, you have the right to call for a specialist from the Administration of Occupational Safety and Health to assess conditions and the work environment. The preferable channel is to get in touch with the RE safety committee or manager that will assess the situation and take appropriate measures if necessary.
- The use of alcohol or drugs is strongly forbidden in work.

2.4 RISK ASSESSMENT - SAFETY APPRAISALS

Reykjavik Energy (RE) promote risk assessment and ensure its operations are subject to safety appraisals and Elmeri inspections.

The objectives of the appraisals are as follows:

- Identify danger in the workplace that could lead to mishaps or accidents.
- Insure the use of personal protection.
- Verify that the workplace fulfils RE rules and official requirements.
- To ensure there is a sufficient level of orderliness in the workplace.

The results are recorded and improvements are made.

2.5 TOXIC SUBSTANCES AND HAZARDOUS MATERIALS

- Use only substances that are approved by RE (see document LBQ-210)
- Choose non-toxic substances if possible.
- Become familiar with safety instructions and danger symbols on packaging before you use the substance.
- Use appropriate personal protection and safety equipment when handling and cleaning substances.
- Don't use toxic substances marked with a skull unless you have the necessary permission.
- Keep substances in closed original packaging.
- Follow instructions on mixing substances.
- Become familiar with the location and use of cooling and eye rinsing materials.
- Make sure of ventilation and air conditioning when handling substances.

How do we deal with a substance mishap?

- Follow directions in the safety instructions.
- Rinse well with lots of water if the skin or eyes are affected.
- Phone the emergency services on **112**.
- If possible take the substance packaging to the doctor.

2.6 DISPOSAL

When disposing hazardous materials and waste, you should adhere to the following instructions and rules.

- Become familiar with the location of the RE hazardous material storage area.
- Use the appropriate personal protection.
- Sort waste according to the RE regulations (LBQ-275).
- Put hazardous substances in hazardous waste containers in locked, original packaging if suitable.
- If there is left over material in the packaging put it in a hazardous waste container.

2.7 NOISE AND HEARING PROTECTION

Noise is any type of unwanted sound.

Noise in the workplace can result in:

- Hearing damage.
- Increased accident risk.
- Less communication.
- Stress.
- Tiredness.

It is not possible to cure hearing damage from certain levels of noise. Minuscule cells in the inner ear can be damaged. Damage to hearing can have serious consequences. Stress is one of the most common effects of noise. Even a little noise can be stressful, such as:

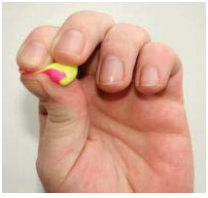
- Frequent phone ringing in the work environment.
- White noise from instruments or equipment.
- Vociferous Individuals.

NOISE CAN OFTEN CAUSE HEARING DAMAGE

What's the solution?

There are often simple solutions to these problems:

- Reduce / exclude the noise at its origin.
- Review work organization and the work environment.
- Produce written housekeeping rules.
- Use the appropriate protection such as earmuffs or earplugs



- Follow RE rules regarding the use of headphones.

2.8 DRIVING

- The driver holds responsibility for the vehicle and passengers.
- It is forbidden to use vehicles if its condition or equipment isn't suitable to the circumstances.
- Driving outside urban areas requires the use of studded or comparable tyres during winter time.
- A good rule is to reverse a vehicle into a parking space.
- Be attentive when reversing and get assistance if necessary.
- Move payloads securely and use markings / flags.
- Secure equipment in vehicles and keep tools in chests or bags. Loose equipment and tools, for example in the back seat can easily turn into dangerous projectiles in a crash or leaving the road.
- Don't let the vehicle run unnecessarily.

- Use appropriate warning lights.
- Keep the vehicle clean and tidy.
- Leave the key in the ignition if you leave the vehicle indoors.
- Distribute the payload equally on trailers and don't overload it.
- Remember that the trailer could easily take control from the driver when breaking.
- It is forbidden to transport passenger in a trailer.
- Watch out for your hands and feet when trailers are disconnected from vehicles and use nose wheels and/or the stands at the back. ***If the trailer's centre of gravity is not correct then the coupling might be slammed upwards or downwards***.
- Avoid driving into dense mist from geological vents. Show extreme care and attention if unavoidable.
- When alighting a vehicle, take care; use the hand rails and running boards. ***There have been many accidents, particularly in icy conditions when workers jump out of vehicles.***

2.9 WINTER TRAVEL

- Assess and take measures against possible dangers during each project. (risk analysis / risk assessment).
- Have a look at the weather prediction and conditions before winter travel.
- Avoid travel in treacherous areas and take extra care.
- Let somebody know about your journey.
- Make sure that the vehicle is correctly equipped for the trip.
- Avoid travelling alone in treacherous conditions.
- Become familiar with communication possibilities in your travel area. Use TETRA with journey tracking.
- Take extra care when driving vehicles in icy conditions, in gullies and in difficult conditions.
- Take along the correct safety and protective equipment.
- Use a helmet when driving snowmobiles and bikes.

2.10 COMMUNICATION

TETRA is important for Reykjavik Energy's operations and the safety of its employees. Use TETRA.

- Become familiar with which types of telecommunications equipment are in use in your work area and get instructions on how to use them.
- Keep in mind the following when using telecommunications equipment.
- Call signals should be short and distinct.
- Speak clearly and concisely and avoid long conversations.
- Repeat received instructions for important operations.
- Use TETRA when requesting electrical disconnections or re-connections.
- Don't use TETRA user groups for chat or amusement.

DRIVING AND COMMUNICATION ARE PART OF SAFETY ISSUES

2.11 HOISTS, LIFTING MACHINERY AND LIFTING EQUIPMENT

- Never use fork-lift trucks cranes or lifting equipment unless you have the necessary rights and / or proficiency.
- Never drive faster than walking speed.
- Never take passengers on fork-lifts.
- Never lift people with fork-lifts unless you have authorized equipment.
- Become familiar with safety instructions about treatment of batteries and chargers for the fork-lift trucks.
- Become familiar with safety instructions concerning acid accidents.
- Insure the stability of the fork-lift.
- Never walk under hanging loads.
- Use ropes to steer loads if appropriate and keep to a safe distance.
- Don´t leave hanging loads behind on a crane.
- Carefully inspect lifting and pulling equipment before use.
- Don’t bump wires or cables on sharp edges.
- Use plate-clamps when lifting plates.
- Check the condition of slings, chains, locks and fastenings before use.
- Verify that all the equipment is made for the weight that you are lifting.

2.12 DIGGING TRENCHES

Get information about cables and pipes before digging.

- Use slopes, trench supports or a tight net on sides and banks, give special attention each time to deep trenches and circumstances (See instructions on trench digging from the Administration of Occupational Safety and Health).
- Don't put excavated material too close to trench banks (> 1 metre).
- Move excavated material away from the worksite as you go along. It could pose a hazard.
- Move chunks of cement, pieces of road and other debris that could possibly collapse into the trench, or cause its banks to collapse.
- Never work alone in deep trenches (> 1,5 metres).
- Check that the bottom of the trench or connection-hole is level and that there is enough room to work.
- Take care when working around cranes, excavators and other machines.
- Take care when working near underground cables and pipes especially if they have been damaged or are apart.
- Inform Systems Management (tel. 516 6200) or the utility owners immediately about damage, even if it seems to be insubstantial.
- Insure that damaged or broken cables are disconnected before beginning work in the vicinity.

3 Various work

3.1 THE WORKPLACE

Is everything in order and regulated in your workplace?

Rules and order:

- All items should have a specific place.
- Don’t keep objects on the floor.
- Tidy everything up after use.
- Wipe up spillages straight away.

Good orderliness and tidiness are important aspects of safety:

- They have a positive effect on safety culture and the wellbeing of employees.
- Contribute to the reduction of mishaps and accidents.
- Encourage proper work practices.
- Improve the image of RE.
- Increase the utilization of space.
- Make for a happier workplace

TIDY EVERYTHING UP AFTER USE

3.2 THE WORKSHOP

- Assess and take measures against possible dangers during each project (risk analysis /risk assessment).
- Use the appropriate personal protective equipment and safety gear.
- Become familiar with the location of safety and emergency equipment in the workplace and ensure escape routes are unobstructed.
- Only work with equipment, machinery and devices if you have the necessary knowledge or experience.
- Become familiar with safety instructions before you start to work.
- Make sure you have adequate work lighting.
- Keep the work environment clean and tidy.

- Make sure of good work conditions and reliable air conditioning.
- Move combustible materials away when welding.
- Protect combustible materials that are not possible to move.
- Be aware of the danger of welding igniting for one hour after the work is finished.
- Use protective visors and safety goggles when using machinery or work that could produce particles and splinters.
- Use earmuffs with noisy jobs or if working in a noisy environment.
- Only use compressed air for those jobs which it is intended for.
- Compressed air is very dangerous in proximity to oil, fat, petroleum jelly and other easily combustible materials.

DISORDER OFTEN LEADS TO AN ACCIDENT

- Don’t blow dust off skin or feet with compressed air. It can cause grievances such as eye damage.
- It is not permitted to control or work with machinery unless you have previous training.
- Use respirators and protective masks or equipment each time substances are used that can be harmful when inhaled.
- Be careful that soap, oil and cleaning products are not left lying on the floor, which could cause accidents.
- Moisten asbestos when handling it.
- When handling asbestos carry a P3 mask and wear protective overalls and gloves.
- Rinse off in the shower room when you have finished working with asbestos.

3.3 METER READING AND CUT-OFFS

- Assess and take measures against possible dangers during each project (risk analysis / risk assessment).
- Use mini crampons in icy conditions.
- Use long rubber gloves when removing the hot water meter.
- If you consider the customer to be dangerous then two workers should go together.
- If you think that a dog poses a threat then request that it is removed. If the owner doesn't respond then you are free to turn back. Note the incident in the meter reading log and add a comment.
- If the accessibility is poor then turn back rather than take a risk:
    - Give the house representative a slip asking for a resolution to the matter.
    - Note the incident and comment to the reader.
    - Take a photo of the conditions and send it to the service connection department (Heimlagnir).
- Avoid clambering over clutter or moving heavy loads.

IT'S BETTER TO GO THE LONG WAY AROUND THAN A RISKY SHORTCUT

3.4 THE KITCHEN

- Assess and take measures against possible dangers during each project (risk analysis /risk assessment).
- Orderliness and cleanliness are important aspects of safety. Follow the housekeeping standards that apply.
- Use the appropriate personal protection when working with food and cleaning and be extremely careful.
- Be careful with knives and sharp utensils and don't leave them where others could injure themselves.
- Lock dripping pans and drawers in oven racks when cooking and preparing.
- Become familiar with safety instructions concerning hazardous materials.
- Use safety goggles and gloves when cleaning ovens.
- Put broken glass in the appropriate hard plastic container

when disposing.

DON'T MAKE THE SAME MISTAKE TWICE

3.5 YOUNG WORKERS

Special provisions govern the work time of young workers

- Consider the possible risks when organising work.
- Establish the skills / capabilities of beginners and assign tasks accordingly.
- Present / introduce the correct work methods.
- Inform and educate workers about good practice, safety issues and emergency response.
- Keep a close eye on the worker until he or she has become proficient.
- Listen to and encourage the employee.
- Compliment when a task is done well.
- Set a good example.

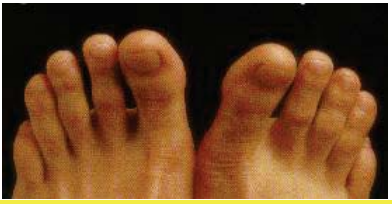
When working you should keep in mind:

- Use the appropriate personal protection and safety equipment.
- Follow RE rules, signs and instructions.
- Ask if you are not sure.
- Don´t use broken equipment, report broken equipment and dangerous circumstances.
- Let someone know if you or your colleague feels unwell, either physically or mentally. **Persecution is not tolerated.**
- Report mishaps or accidents to a manager.
- Keep the workplace orderly; put everything in its place after use.
- The usage of fuel is dangerous, take care.
- Don’t use machinery to transport people.
- Rules also govern free time in the workplace..

3.6 GARDEN WORK

Only those that have been trained in the use of lawn mowers and trimmers, and have received information about how they can be dangerous are allowed to use them

- Identify and provide against dangers that could arise in each work situation (risk analysis / risk assessment).
- Use the appropriate personal protection and safety equipment.
- Use lawn mowers with safety handles.
- Check whether the safety protection and equipment on machines is intact and in place.
- Don't use broken equipment or tools.
- Turn lawn mowers off before you clean out the grass catcher.
- Turn lawn mowers off before going over obstacles.
- Secure machinery and dangerous materials.
- Clean tools and confirm that they are in good condition before returning them.
- Don't mess with equipment, ask if you are not sure.



TEN GOOD REASONS FOR USING SAFETY SHOES

3.7 INSPECTION, METERS AND INTAKE EQUIPMENT

Electricity:

- Use face screens with open and unprotected equipment.
- Use electrical safety gloves when there is a danger of coming into contact with live objects.

Hot Water:

- Use long lined rubber gloves when repairing, restoring or changing meters.
- Before commencing work connecting / disconnecting home lines from the domestic system or meter interchange, you should connect a conductance cable in-between where needed.
- If you feel abnormal electrical current in the hot water rack, notify the domestic connections department who will authorize further work.

Abide by the following work procedures:

- Close the intake taps.
- Confirm that the flow has stopped.
- Take care when loosening filters.
- Test that there is no pressure before loosening the union connection.

Cold Water:

- Inform the water distribution department if the grounding cable is disconnected when renewing domestic cold water pipes.

3.8 RESEARCH

- Identify and provide against dangers that could arise in each work situation (risk analysis / risk assessment).
- Use the appropriate personal protection and safety equipment.
- Become familiar with the location of safety and emergency equipment in the workplace and ensure escape routes are unobstructed.
- Become familiar with safety instructions for materials that will be used and follow instructions completely concerning personal protection.
- Be under the watch of another member of staff when sampling from high temperature holes, steam pipelines in power plant areas and mud pots.
- Move straightaway to a safe area if there is an alarm from a sulphur detector.
- Have BurnFree / BurnRelief with you when sampling and make sure you know the how to react to burns accident (see section 11.1).

3.9 CONTRACTORS

The employment of contractors depends on work authorization and carrying out risk assessment. The same rules apply to contractors and Reykjavik Energy employees. For example:

- The use of safety equipment and personal protection.
- Location of work cabins.
- Setting up fall protection.
- Signs and marking out work areas.
- Work methods.
- Conduct and cleanliness.
- Supervision and maintenance of equipment.
- Treatment and disposal or material.

Consultation and teamwork is the key to safety.

Contractors should become familiar with:

- Accident and emergency response (sections 11 and 12).
- Positions of pipes and cables.
- The location of first-aid equipment.
- The location and use of fire extinguishers.
- The workplace evacuation plan.

Contractors should follow RE rules concerning incidents and accidents.

- Notify the caretaker / shift worker about work that is likely to trigger the fire alarm.

OUR IMAGE IS CONNECTED TO OUR CONTRACTORS IMAGE

4 Electrical Utilities

4.1 GENERAL SAFETY RULES

All electrical / electrical equipment work is bound by electrical safety management regulations.

- Don't work with electricity / electrical equipment unless you are authorized, proficient and the consent of the electric board management.
- Identify and provide against dangers that could arise in each work situation (risk analysis / risk assessment).
- Use the appropriate personal protection and safety equipment.
- Become familiar with the location of safety and emergency equipment in the workplace and ensure escape routes are unobstructed.
- Become familiar with and follow *without exception* regulations that govern electricity / electrical equipment work.
- Only electricians shall be responsible for connections and adjusting switch gear.
- Everybody who works with electricity should attentively become familiar with regulations concerning electrical safety that can be found for example in Memorandum nr. 1/84.

In all cases before commencing work, the five safety rules must be complied with:

- **Total disconnection**
- **Safeguard against the system being switched on again**
- **Verify that the system is not live**
- **Earth and short-circuit the live components**
- **Cover or cordon off any neighbouring live components**

4.2 STREET LIGHTING

- Identify and provide against dangers that could arise in each work situation (risk analysis / risk assessment).
- Use the appropriate personal protection and safety equipment.
- Become familiar with the location of safety and emergency equipment in the workplace and ensure escape routes are unobstructed.
- Take extra care before a cable is made live.
- Verify that the correct cable has been made live.
- Put the stabilising feet down on a lifting truck before lifting the basket.
- Comply with regulations concerning cordoning off the work area and make sure road users are not in danger.
- On trunk or through roads a vehicle with a warning light trailer should accompany the lifting truck to make sure that it is not crashed into.
- Never be without supervision when working at heights and take extra care.
- Take extra care when working on stairs or ladders and don't work alone. Use safety harnesses where appropriate.
- Don't discard hot light bulbs in packaging that could ignite.

An electrical safety warden will be assigned by the foreman if working near live components. The warden should keep a close eye on the work's progress and warn workers of live sections. To insure complete safety, the warden may only supervise a limited number of employees, and the size of the work area should be limited.

- When lampposts are removed, make sure it doesn't fall when digging it out.
- When lifting posts with a post-grasp, the post should be grasped close to the centre of gravity to avoid straining the turning-crown of the grasp.
- Take care when the outer glass of glowing mercury lights is broken. ***Ultraviolet beams can create welding blindness***.
- Disconnect the lighting device before removing a broken bulb.
- Use disposable gloves when you take a lamp apart that could have PCB in its capacitor. It's hazardous to let PCB come in contact with the skin.
- Put the capacitor and gloves in a closed bag and the bad in a hazardous materials container.
- Become familiar with regulations governing working in lightning storms (Company rules and in Memorandum nr. 1/84).

4.3 OVERHEAD LINES

- Identify and provide against dangers that could arise in each work situation (risk analysis / risk assessment).
- Workers should never work alone with overhead lines.
- Don't go up masts / lampposts without training and only under the supervision of an experienced worker.
- Use the appropriate personal protection and safety equipment.
- When climbing posts use post-shoes and a post-belt with a life-line.
- You should assess the condition of a post before climbing it and look for signs that indicate how deep it is buried in the earth.
- Become familiar with the location of safety and emergency equipment in the workplace.
- Ensure everything is disconnected and is visibly earthed.
- Check safety equipment before use.
- Make sure broken or cut safety equipment is taken out of use. If safety equipment is repaired it must be done by an authorized party.
- Use the appropriate electrical safety gloves when taking out or putting in high and low voltage fuses, and when earthing overhead lines.
- Use the appropriate electrical safety gloves when there is a danger of touching live components.
- Take extra care before electrically connecting a cable.
- When the connection has been made, make sure that the correct cable has been connected with a measuring device or another suitable method.
- Become familiar with regulations concerning working in electrical storms (company rules and in Memorandum nr. 1/84).

- Take care around iced or severed overhead lines. Take care if climbing a mast / post in icy conditions.
- If you can feel a tickling sensation in your feet or bottom half of the body when approaching and electrical accident, it's likely that the electricity has not been disconnected. Stop immediately and turn back.

4.4 UNDERGROUND CABLES

Underground cables can be dangerous, it is important to have the following in mind:

- Identify and provide against dangers that could arise in each work situation (risk analysis / risk assessment).
- Use the appropriate personal protection and safety equipment such as face shields and electrical safety gloves when changing fuses in mains fuse boxes, connection cupboards, sub stations and all work in live connection cupboards.
- Take extra care when working near underground cables.
- Take special care with unconnected cable ends; they could be live or contain an electrical charge.
- Take care when electrically connecting a cable.
- Verify that the correct cable has been connected.
- If you come across a damaged underground cable, don't leave the scene before a responsible party has taken control.
- If it is possible to positively identify the cable ends with drawings or a cable finding equipment, test that the cable ends are not live.
- Use a cable-gun when cables are taken apart.

TAKE EXTRA CARE NEAR UNDERGROUD CABLES

- Take extra care when handling gas appliances and have a fire extinguisher to hand.
- Comply with regulations concerning cordoning off the work area and make sure road users are not in danger.
- Acquire information about cable positions and consult the parties concerned before digging.
- Ensure the phase order is correct when connecting cables, interchanges could cause damage or accidents.
- Take extra care connecting phases when connecting older cables with new.
- Become familiar with cable colour codes.

L1	L2	L3	N	
Brown	Black	Gray	Yell Green	Default for new cables
Blue	Black	Brown	Yell Green	From 1986
Black	Black	Brown	Blue	From 1985
Blue	Black	Brown	Screen	
Red	Blue	Gray	Screen	
Red	Black	Blue	Screen	
Red	Black	Gray	Screen	

This table is not valid for Akranes.

- Ensure that there are no nails extruding from the cable drum and that it is secured on the drum trailer.
- Never work alone whilst working with maintenance or laying sea cables, a lifejacket must also be worn or buoyancy aids used.

4.5 FIBRE-OPTICS

- Identify and provide against dangers that could arise in each work situation (risk analysis / risk assessment).
- Use the appropriate personal protection and safety equipment.
- Ensure fibre-optic equipment is not connected with cables that are being measured. Mark cables that you are working with.
- Make sure that you never look directly at the end of a fibre optic.
- Take care when working with fibre optics, fibre strands can easily pierce the skin and enter the bloodstream.
- Put fibre cuttings in a closed container and dispose of them as hazardous waste.
- Vacuum-clean the area carefully when you have finished working.
- Ensure that hoses, pipes and connections are made to handle pressure when working with air pressure.
- Try to make sure where possible that hoses that break under pressure are not able to flail.
- Never leave fibre optic ends open. Boxes should always be closed (splice-boxes, wall outlets) and carefully marked.
- Put casing over cable ends if you need to leave it unconnected

TAKE CARE WITH CABLES

4.6 TRANSMISSION STATIONS AND CONNECTION WORK

- Work in and with transmission stations shall only be controlled by those qualified to do so.
- Identify and provide against dangers that could arise in each work situation (risk analysis / risk assessment).
- Follow the access rules of the safety control system.
- Make sure that unauthorised persons don't enter transmission stations without the supervision of qualified person.
- Use the appropriate personal protection and safety equipment.
- Never work alone with connection work or in transmission stations, unless you are performing simple checks or safe tasks.
- Comply with the five safety rules (see page 35).
- Take extra care before equipment is connected.
- Take precautions when working with ladders or scaffolding where there is a danger of falling.
- It is only permitted to work on scaffolding if all the relevant points of checklist EBQ-357 have been complied with.
- Take extra care with batteries.
- Lock the doors and gates when you leave the station.

4.7 SWITCHGEAR CONTROL

Basic essential information.

1. Consider that all the switchgear is live.
2. Always use a voltage tester, also when you are 100% sure (see SF_6 pilot light).
3. Think again, don´t rush into switchgear work.
4. Check whether all the phases have gone out and / or in.
5. Firmly execute connections and disconnections, especially with older types of switchgear.
6. Without exception connections and disconnections must be carried out in agreement with systems control.
7. Always use the appropriate safety equipment, for example high voltage electrical safety gloves and eye shields.
8. With line interruption you are breaking the current not voltage. Don't take anything for granted.
9. Never work alone with line interruption.

400V switches / connecting.

1. Before energising, make sure that all the work is finished and that the ends of the cable are alright.
2. After energising, check that everything is correctly connected by colour and direction of rotation.
3. In open cabinets (fuse), Don´t install a new fuse when energised.
4. Interruptions are always executed after preparation and consultation.
5. Be careful when cutting off in open cabinets (fuse).

4.8 SUBSTATIONS AND STREET CABINETS

- Only qualified persons can direct work in substations and street cabinets.
- Identify and provide against dangers that could arise in each work situation (risk analysis / risk assessment).
- Follow the access rules of the safety control system.
- Make sure that unauthorised persons don't enter a substation without the supervision of a qualified person.
- Use the appropriate personal protection and safety equipment.
- Never be alone when repairing or working in a substation.
- Comply with the five safety rules (see page 35).
- Use a switch card when high or low voltage switches are shut off.
- When working near live components, use the appropriate shields (high voltage) and rubber covers (low voltage).
- Ensure that the correct equipment has been disconnected.
- Take extra care before equipment is connected.
- Verify that the correct equipment has been connected.
- Take special care when working with ladders, scaffolding, high voltage, and where there is a danger of falling. Use life lines and safety harnesses where appropriate.
- Update labels and changes.
- Leave an indicator if a substation if left with an unfinished floor.
- Lock doors and gates when leaving a substation.

5 Power Plants

5.1 GENERAL SAFETY RULES

- Don’t direct or work with machinery / electrical equipment without the relevant training.
- Identify and provide against dangers that could arise in each work situation (risk analysis / risk assessment).
- Follow the access rules of the safety control system.
- If you are a contractor, notify arrivals and departures to the warden on duty.
- Make sure that unauthorised persons are not left unsupervised in the power plant without a qualified supervisor.
- Use the appropriate personal protection and safety equipment.
- Become familiar with the location of safety and emergency equipment in the workplace and ensure escape routes are unobstructed.
- Become familiar with the escape routes and contingency plans for the buildings that you are working in.
- Take care and follow the regulations „Disconnection and work“.
- Take care when close to machinery areas and equipment.
- Be aware of oxygen shortages / gas formation in closed rooms.
- Never work alone with live equipment or with hazardous work.
- When working with electrical equipment the switchgear should be carefully shut off.
- Ensure you lock down movable equipment and covers.

NEVER WORK ALONE WITH LIVE EQUIPMENT

5.2 HYDRO-ELECTRIC POWER STATIONS

- Take care when working near station waterways, dams, intakes and drains.
- Take care with generators and their flywheels.
- Use a floatation suit connected to a lifeline when working on dams, and also when cleaning intake channels.
- Put the safety on water flaps before beginning work on machinery, pressure pipes or outlets.
- Put the safety on working regulators before work begins on the moving parts of machinery.
- Be especially aware of hazardous work in practice.
- Use an oxygen meter and have respirators available when working in closed rooms, tunnels and dams.
- Never be alone in hazardous areas such as:
    - In high voltage rooms.
    - When cleaning turbines.
    - Inside machinery.
    - When cleaning intakes.
    - Within the gates of intake structures.

5.3 GEOTHERMAL POWER PLANTS

- Become familiar with the boreholes handbook.
- Be especially careful near steam, hot water and hot areas.
- Ensure that pipelines will not be used when work is in progress.
- Be careful in areas where there is a danger of ice because of steam.
- General safety rules govern machine and pipeline work in chapter 2. Become familiar with the correct response to burn injuries in chapter 11.

Hydrogen sulphide

- Use the H_2S warning meter or an oxygen meter during work with boreholes / vaults / low areas.
- Never work alone during such work and always have a respirator with you.
- Move quickly to a clean air area if the alarm system sounds and inform the shift warden immediately about the gas.

H_2S is a combustible gas. When H_2S is present there is a fire and explosion danger.

Carbon Dioxide

CO_2 is an odour and colourless gas that can settle in vaults and depressions due to its density. Inhaling can immediately paralyze the respiratory system, leaving the person helpless.

Be aware that the greatest danger is if gas collects in pipelines and operational borehole vaults (both H_2S and CO_2).

BOREHOLE WORK REQUIRES SPECIALIST KNOWLEDGE

Separated water and steam.

- All work should be carried out under the guidance of a skilled technician.
- Take care and ensure that covers on separators are open out to the air before manholes are opened.
- Ensure good ventilation in separators or pipelines when working in them.
- Properly open up the pipelines and blow them out to get rid of gas and also to cool and dry the pipes.
- Use an oxygen meter when working in pipelines.
- Lock switchgear with a personal lock when working with electrical equipment, especially cooling fans.
- Have an assistant outside by the separator opening who monitors those inside. Use TETRA.
- When working on top of borehole housing, ensure good access, adequate fall protection and use a lifeline.

Asbestos and sodium hydroxide:

- When handling asbestos packaging use protective overalls, single use face gauze, protective glasses and gloves.
- Use the appropriate personal protection when working with sodium hydroxide.

Corrosion danger

In order to prevent the risk of accidents that can occur because of pipeline corrosion, the following practices shall be carried out:

Reykjavik Energy steam pipelines and equipment used in the geothermal plants all have a very long serviceable lifespan. Corrosion danger is therefore negligible. However there is a danger if moisture creeps into the insulation from the outside. It is therefore important to check that the insulation is alright and that moisture hasn't leaked into it. Un-insulated pipelines and equipment (sound reducing) should also be monitored and protected from corrosion, for example with a coating or by painting.

The greatest corrosion danger is when hot steam leaks into pressure-less pipelines or equipment.

In such cases condensed steam and acidic separation water corrodes the pipeline or equipment from inside. The pipelines and equipment should be closed and drained at low points. It is important to perform regular inspections on pressure-less pipelines or equipment, look out for corrosion in the insulated pipelines and equipment, and take immediate action if the insulation has been compromised.

Pressure testing:

Steam pipelines shall be pressure tested when they are first taken into use, and then every four years.

Pressure checking is always carried out with steam by increasing the pressure on the utilities to the test pressure. The opportunity is often taken to perform extensive testing when extensions or changes are carried out. A recognised independent party should be called upon.

All traffic in the vicinity of pipelines or equipment is banned when pressure testing is carried out with steam and whilst pressure is above operational pressure.

After repairs or changes to system components, a pressure test should be performed with water.

This is also relevant for pipelines where corrosion has occurred or corrosion is suspected. A recognised independent party should be called upon.

5.4 DIESEL POWER GENERATORS

- Take care and keep the work environment clean and tidy especially with oils and other materials that could pose a fire / accident hazard.
- Use of naked flames in the vicinity of flammable materials is strictly prohibited.
- Take special care when filling the oil.
- Become familiar with how to close off the oil from the main tank in the event of a leaking pipe.
- Take care close to cooling fans, they are often self-controlled.
- Take care of exhaust from running engines.

5.5 HEATING STATIONS

- Ensure that it is not possible to start up the system whilst you are working.
- Ensure that there is no pressure, and that pipes and equipment are empty before beginning work.
- Ensure that the heat exchangers electric kettles have cooled sufficiently before you begin working.
- Use authorised electrical equipment when working with kettles and cramped rooms.
- Take care and keep the work environment clean and tidy especially with oils and other materials that could pose a fire / accident hazard.
- Use of naked flames in the vicinity of flammable materials is strictly prohibited.
- Take special care when filling the oil.

TAKE SPECIAL CARE WHEN FILLING OIL

6 Heating utilities

6.1 GENERAL SAFETY RULES

Have the following in mind when working with hot water:

- Identify and provide against dangers that could arise in each work situation (risk analysis / risk assessment).
- Use the appropriate personal protection and safety equipment.
- Ensure that footwear has special protection for hot water.
- Be especially alert in the vicinity of hot waterlogged surfaces and use appropriate safety clothing.
- Become familiar with the location of safety and emergency equipment in the workplace and ensure escape routes are unobstructed.
- Comply with regulations concerning cordoning off the work area and make sure road users are not in danger.
- Ensure that it is not possible to begin using a pipe whilst work is carried out.
- Never be without supervision when working in closed rooms or off the beaten track, unless you are performing simple checks or safe tasks.
- Don´t work with pipes under pressure, with wet corrosion bumps or if there is a likelihood of leaking.
- Dress in a floatation suit, boots and gloves when working with shutoffs and valve openings in main-shutoff-manholes where there are to and from asbestos pipes.
- Dress in wellington boots, rubber overalls, long rubber gloves and a helmet when working around asbestos pipes with valve openings / shut offs / air removals.
- Never be without supervision when with valve openings / shut offs / air removals.
- Put supports under suspended pipe when you are welding it from below.

- The operation manager authorises openings when the work is over.
- When valve opening, air removing and filling tankers use wired pressure hoses and high pressure connections.
- Use earmuffs when opening valves.
- Use face screens when applying insulation by hand.
- Dress in a floatation suit, boots and gloves if it's absolutely necessary to enter an area flooding with hot water or a waterlogged surface.
- When working on Hveragerði's hot water utility, take care when removing blockages with a rod.
- Wear long lined rubber gloves, rubber overalls and wellington boots when removing blockages with a rod.
- General safety rules in chapter 2 govern machine and pipe work. Become familiar with response to burn accidents in chapter 11.
- Take extra care with steam, hot water and hot surfaces. Steam can burn just as much as hot water.
- Steam can be hazardous if it obscures vision.

STEAM CAN OFTEN IMPAIR VISION

- If there is a danger of hydrogen sulphide building up:
  - Don’t be without supervision.
  - Carry a H_2S warning meter that gives a warning if nearing dangerous levels.
  - Aerate the work area well where possible.
- Use blowers when working in hot and humid environments.
- Don´t wear flapping clothing when working.
- Take extra care on ladders.

Pipe laying work

- Follow instructions concerning trench digging in chapter 2.12.
- Before beginning connecting / disconnecting home lines to the domestic system or meters, a conductivity cable should be connected in between.
- Take care when welding and use the appropriate safety equipment.
- Ensure good ventilation when performing connection work and handling hazardous materials.
- Carefully open / close the distribution system.
- If the condition of domestic piping is unsafe then the house owner should be informed immediately.
- Ensure that it is not possible to begin using a pipe whilst work is carried out.
- When valve opening, air removing, connection under high pressure use a wired pressure hoses and high pressure connections.
- If electricity cables have become soft from heat, then you should wait for an electrical professional to permit work.
- Where applicable, make sure that pumped hot water goes straight to the drain.

-
- Take care when pipes are frozen with liquid nitrogen. ***Liquid nitrogen is extremely cold; around -180 °C and can cause serious injuries to the body.***

- Use rubber gloves, safety goggles, boots and an apron when working with liquid nitrogen.
- Take care when working with nitrogen and carbonic acid. ***Both substances can collect in trenches and cause suffocation***.
- Find out the positions of other utility cables and conduits when preparing for drill work or trench digging.
- It is not permitted to work with asbestos unless you have been on a course authorised by Administration of Occupational Safety and Health in Iceland.
- Comply with RE regulations concerning working with asbestos and use the appropriate personal protection.
- Take care when working with leaks, and pressure testing.
- Ensure that pipes are free from air pockets when pressure testing with water.

Mechanical work in pumping stations

- Only experienced / professionals shall work with equipment in the distribution system.
- Be especially careful when screwing valve seals.
- Don´t work with running pumps or motors, unless you are screwing valve seals.
- When working with pumps or motors, take out the switch, mark it in a clear manner and lock it with a personal lock if possible.
- Don´t wear flapping clothing when working.

6.2 SUPPLY PIPELINES AND VALVE HOUSES

- Be aware of flows and always have the appropriate safety and emergency equipment with you.
- Be especially on the lookout for dangers on hot waterlogged surfaces and use the appropriate protective clothing.
- Ensure that unauthorised persons cannot change the position of the valves.

6.3 STORAGE TANKS AND PUMPING STATIONS

- Become familiar with safety instructions before use.
- Use the correct equipment for high pressure cleaning and ensure that it is in a good condition.
- Take care when high pressure cleaning and use the appropriate personal protection.
- Keep other workers at a safe distance when high pressure cleaning.

6.4 DISTRIBUTION SYSTEMS AND MANHOLES

- There should never be more than two working at once in difficult cramped manholes.
- Use hooks to lift manhole covers. It is preferable for two to work together when lifting heavier manhole covers.
- Manholes should always be locked. If they need to be opened for work, cordon off the opening.
- Verify that the air ducts are alright and that the cover cannot be closed behind you.
- Illuminate the manhole and check for water before you go down.

- Take special care when using the manhole steps.
- When painting in a manhole use an air blower, fresh air equipment and mask where appropriate.

7 Water utilities

7.1 GENERAL SAFETY RULES

Have the following in mind when working with water utilities:

- Assess and take measures against possible dangers during each project (risk analysis /risk assessment).
- Use the appropriate personal protective equipment and safety gear.
- Become familiar with the location of safety and emergency equipment in the workplace and ensure escape routes are unobstructed.
- Ensure that the pipe cannot be used whilst working on a pipe.
- Comply with regulations concerning cordoning off the work area and make sure road users are not in danger.
- Never be without supervision when working in closed rooms and / or off the beaten track, unless you are when performing simple checks or safe tasks.

- For safety, test your oxygen meter before entering a closed room.
- Mechanical and pipe laying work is governed by general safety rules in chapter 2.
- Don´t wear flapping clothing when working.
- Take special care when using ladders.

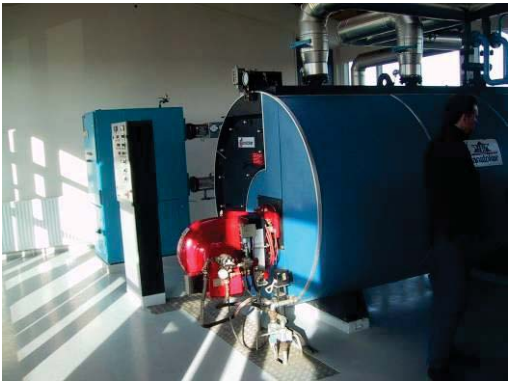
Pipe laying work

- Comply with regulation about trench digging in chapter 2.12.
- Before beginning connecting / disconnecting home lines to the domestic system or meters, a conductivity cable should be connected in between.
- Take care with welding work and use the appropriate safety equipment.
- Ensure good ventilation with welding work and handling hazardous materials.
- Let the owner know immediately if the condition of pipes or cables is hazardous.
- Ensure that the pipe cannot be used whilst working on a pipe
- Put supports under suspended pipe when you are welding it from below.
- Take care when pipes are frozen with liquid nitrogen. ***Liquid nitrogen is extremely cold; around -180 °C and can cause serious injuries to the body.***
- Take care when working with nitrogen and carbonic acid. ***Both substances can collect in trenches and cause suffocation***.

- Find out the positions of other utility cables and conduits when preparing for drill work or trench digging.
- It is not permitted to work with asbestos unless you have been on a course authorised by Administration of Occupational Safety and Health in Iceland.
- Comply with RE regulations concerning working with asbestos and use the appropriate personal protection.
- Use a helmet, face screen, gloves and an apron when you work with molten lead joining (lead packing).
- Use a respirator, heatproof overalls and long heat resistant gloves when you work with tar.
- Use gloves, a respirator and safety goggles when you are working with tar matting.

Engine work

- Take special care when screwing valve seals.
- Don´t work with pumps or running motors, unless you are screwing valve seals.
- When working with pumps or motors, take out the switch, mark it in a clear manner and lock it with a personal lock if possible.



7.2 CATCHMENT AREAS

- Be aware of flows and always have the appropriate safety and emergency equipment with you.
- Never be without supervision when working near open water springs.

7.3 SUPPLY PIPELINES AND VALVE HOUSES

- Be aware of flows and have the appropriate safety and emergency equipment with you.
- Make sure that unauthorized persons cannot chance the position of valves.

7.4 STORAGE TANKS AND PUMPING STATIONS

- Take care when high pressure cleaning and use the appropriate personal protection.
- Use the correct equipment for high pressure cleaning and ensure that it is in a good condition.
- Keep other workers at a safe distance when high pressure cleaning.
- Become familiar with the substance safety instructions before use.
- When working with pumps or motors, take out the switch, mark it in a clear manner and lock it with a personal lock if possible.
- Make sure that unauthorized persons cannot chance the position of valves.

7.5 DISTRIBUTION SYSTEMS AND MANHOLES

- Manholes should always be locked. If they need to be opened for work, cordon off the opening.
- Verify that the air ducts are alright and that the cover cannot be closed behind you.
- Illuminate the manhole and check for water before you go down.
- Take special care when using the manhole steps.
- When painting in a manhole use an air blower, fresh air equipment and mask where appropriate.

8 URBAN DRAINAGE

8.1 GENERAL SAFETY RULES

Have the following in mind when working with urban drainage:

- Identify and provide against dangers that could arise in each work situation (risk analysis / risk assessment).
- Use appropriate personal protection and safety equipment.
- Become familiar with the location of safety and emergency equipment in the workplace and ensure escape routes are unobstructed.
- Ensure that pipelines will not be used when work is in progress.
- Comply with regulations concerning cordoning off the work area and make sure road users are not in danger.
- Never be without supervision when working in closed rooms or off the beaten track, unless you are performing simple checks or safe tasks.
- Don´t wear flapping clothing when working.
- Take special care when using the ladders in pumping stations.

General safety rules continued…

- For safety, test your oxygen meter before entering a closed room.
- Mechanical and pipe laying work is governed by general safety rules in chapter 2.
- There are many invisible disease spreading germs in the urban drainage system. When work has finished, be especially thorough when cleaning hands, clothing and tools.
- Make sure that urban drainage tools don't end up in projects for other utilities.
- Use the appropriate respirators (P3) when cleaning manholes and pump cisterns.
- If the air is suspected to be polluted then air blowers should be used.
- Get advice about inoculations against disease spreading germs from the company doctor.

Pipe laying work

- Comply with regulation concerning trench digging in chapter 2.12.
- Take care when welding and use the appropriate safety equipment.
- Ensure good ventilation when performing connection work and handling hazardous materials
- When trench digging pay special attention to the location of other utility's cables and conduits.

Engine work

- Don't work with running pumps, screw washers or motors.
- When working with pumps or motors, take out the switchgear and label it in a clear manner. If possible, lock it with a personal lock.

8.2 CLEANING AND PUMPING STATIONS

- Take care when high pressure cleaning and use the appropriate personal protection.
- Use the correct equipment for high pressure cleaning and ensure that it is in a good condition.
- Keep other workers at a safe distance when high pressure cleaning.
- Become familiar with substance safety instructions before use.
- Ensure that unauthorised persons cannot change the position of valves.

8.3 URBAN DRAINAGE AND MANHOLES

- Manholes shall always be locked. If they need to be opened for work, then cordon off the opening.
- Ensure good ventilation and that the cover cannot be closed behind you.
- Illuminate the manhole and check for water before you go down.
- Take special care when using the manhole steps.
- When painting in a manhole use an air blower, fresh air equipment and mask where appropriate.

9 OFFICE WORK

9.1 GENERAL SAFETY RULES

- Get the property caretakers to remove broken or damaged furniture.
- Inform the property caretakers about items that could cause tripping.
- Inform the computer department about cables and lines that are lying on the floor.
- Promptly clean up or let someone clean up spillages or dirt from the floor.
- Close drawers and cupboard doors after use.
- Never use office chairs on wheels, shelving or unstable tables instead of step ladders.
- Take care when using step ladders near corners or doors.
- Let professionals repair electrical plugs and devices.

9.2 MONITOR DEVICES

Worktables:

If the table height is adjustable:

1. Set the chair height so that both heals are flat on the floor and the hips are slightly above the knees.
2. Set the height of the table so that the elbows are at the same height or a little higher than the keyboard.
3. Aim to achieve a working height so that it's possible to sit with a straight back and relaxed shoulders.

If the table height is not adjustable:

1. Set the height of the chair so that the elbows are at the same height or a little higher than the keyboard.
2. Use a footboard if the heals doesn't reach the floor.

CLOSE CUPBOARD DOORS AFTER USE

Desks and chairs

- Become familiar with the office chair settings.
- Set the height of the chair back so that the curvature is at the small of the back.
- Sit with a straight back and use the back of the chair.
- Frequently change your position, for example adjust the seat angle if possible.
- Stand up or use the wheels and rotate the chair when getting items from nearby shelving.
- Lift objects with both hands and ovoid twisting the back.

Monitors and eye protection

Position the monitor so that:

- Light from the windows or lights doesn't shine straight into the eyes or reflect off the screen.
- The top edge of the screen is at eye height.
- The screen is around an arm's length from the body (45-60 cm).
- The screen is in front of the middle of the body.

Eye protection

- Have a regular eye and vision check up (LBQ-316).
- If you use glasses make sure that they are suitable for working with screens.
- Take regular short breaks and look away from the screen to rest the eyes.
- Reduce the difference in brightness between the environment and the screen (adjust lighting, adjust the brightness on screen).

INTERCHANGE BETWEEN STANDING AND SITTING IF YOUR DESK ALLOWS IT

Mouse, keyboard and document holders

- Position the keyboard in front of the middle of the body.
- Position the mouse to the side, at the same height as the keyboard.
- Use both the left and right hand for the mouse if you feel physical discomfort that could be connected to mouse use.
- Let your elbows rest close to your body when typing.
- Rest the forearm on the area in front of the keyboard.
- Have wrists in a neutral position.
- Use keyboard shortcuts rather than the mouse if possible.
- Use a steady and adjustable document holder that suits you work.
- Have the documents in the holder at the same distance and a similar height to the screen.

Movement

- Avoid motionless work, for example holding muscles tense for a long time. Motionless work reduces the blood flow to the muscles and leads to tiredness and discomfort.
- Interchange between sitting and standing if your desk allows it.
- Use a stretch-break exercise program if you are sitting for a long period.

This is how we want to treat one and other:

- **We value each other but don't scold each other**
- **We set the phone on low ringing and don´t speak loudly on it**
- **We take messages if there is no one to answer a call**
- **We are cooperative and value each other's opinion**
- **We listen to the radio on headphones**
- **We clean and tidy-up after meetings**

AVOID MOTIONLESS WORK

10 HEALTH

By thinking about your daily routine and outlook its possible improve you state of mind and physical health. Helpful advice can be found at www.landlaeknir.is

The aim of RE is to promote a healthy lifestyle for its employees especially if they are working in difficult positions under pressure.

10.1 PHYSICAL HEALTH

- It is recommended that employees regularly go for a health check-up.
- You have the right to a health check-up if risk assessment indicates a danger of physical impairment at work.
- Have your work risk assessed if you are pregnant.
- It's a good rule to go for a fitness test if you're employed in difficult work.

Smoking

Smoking and passive smoking increases the risk of cancer, respiratory and heart diseases, and venous diseases.

- Take consideration of your workmates and remember that everyone has the right to a smoke-free work environment.
- It is only permitted to smoke in designated smoking rooms.
- It is strictly forbidden to smoke in RE vehicles.
- If you need help stopping smoking then you can find helpful information at www.lydheilsustod.is

Alcohol and drugs

Use of alcohol and drugs increases the danger of accidents.

Psychological and social difficulties are often accompany alcohol and drug use.

Remember that it's strictly forbidden to use alcohol and other drugs in work.

10.2 MENTAL AND SOCIAL HEALTH

Communication

Our conduct towards one and other is very important to ensure safety and wellbeing.

- Complement workmates when they deserve it.
- Have in mind that all kinds of thoughtlessness and jokes can be inappropriate.
- Treat all employees with respect.
- Sexual harassment or discrimination is not tolerated.
- Crude jokes or conduct, that offend or cause sentimental harm are not tolerated.
- Stories about workmates can hurt and cause insecurity.

Do you feel unwell at work?

The most common symptoms of stress related dispositions are:

- Tiredness.
- Concentration difficulties.
- Mood swings.
- Communication difficulties.
- Depression.
- Anxiety.
- Sleeping difficulties.

You can find information about improving your frame of mind at www.lydheilsustod.is

What can we do?

RE aims to provide a safe and healthy work environment so that employees feel well in work.

If you think that your work load is too much, experience harassment or discrimination, then you should look to a shop steward, personnel manager or someone else that you trust. The problem will be resolved in cooperation with you and in full confidentiality.

AT A GOOD WORKPLACE COLLEGUES TRUST EACH OTHER

10.3 EXERCISE AND A BALANCED DIET

Exercise and a healthy diet increase your wellbeing and increase your stamina at home and at work.

Exercise and physical exertion are essential for everyone.

Have the following in mind:

- Choose an exercise that you enjoy.
- Use the stairs instead of the elevator.
- Cycle or walk. Park the car a bit further away.
- Use a break exercise program

Exercise daily for at least 30-60 minutes.

A balanced diet:

- Daily fruit and vegetables.
- Fish twice a week or more.
- Wholegrain bread and other grains.
- Low fat and low sugar milk products.
- Salt in moderation.
- Cod liver oil or another D vitamin provider.
- Sugar, cakes, sweets, ice cream, alcohol and fizzy drinks in moderation.
- Drink allot of water, often each day.

Assess your own diet and see where you stand. You can find various information and self assessment material at The Public Health Institute of Iceland homepage, http://www.lydheilsustod.is/english/

10.4 THE MUSCULAR-SKELETAL SYSTEM

The most common stress symptoms in work are pains in the back, neck and shoulders and involve:

- Work conditions.
- Unsuitable work posture or movement.
- Physical labour.
- Repetitious movements.
- How the work is organised.
- Emotional and sociological aspects like communication, information flow and stress.

What can we do?

- Adopt a good posture.
- Adjust your workspace so that the height and area suits you.
- It's good to interchange between standing and sitting.
- Use a stool and suitable aids if available.
- Often change you work posture.
- Wear good shoes and clothes.
- Take a regular break from work.
- Move yourself regularly.
- Use suitable aids.

10.5 LIFT IT CORRECTLY

The right level of physical exertion is important!

Use equipment or ask a co-worker to assist you when lifting or carrying items.

If you need to lift:

- Think about the weight of the item (< 25 kg).
- Maintain a good space between the feet.
- Face the object directly and stand as close to it as possible.
- Bend the knees and the hips and keep your back straight.
- Get a good grip with straight elbows and relaxed shoulders.
- Lift whilst shifting your body weight from your toes to your heals.
- Straighten up carefully using your knees and hips at the same time.
- Avoid repetitious lifting.

If you need to carry:

- Distribute the weight equally between the left and right sides of the body.
- Keep the load close to the body and have a straight back.
- Interchange between hands if the load is only carried in one hand.
- Use equipment where possible, for example wheelbarrows or a trolley.
- Make sure that you can see well in front of you and that the way is clear.

11 ACCIDENTS – RESPONSE AND DOCUMENTING

In the world many people die every year during rescue work. Be aware of the dangers at the accident site and sensible during rescue attempts. Don't put your life at risk.

11.1 BURN ACCIDENTS INVOLVING HOT WATER

- Always have a first aid kit with burn gel when working with hot water.
- Consider all burn accidents as serious, even if you cannot see and injury or redness.
- Ensure safety at the scene.
- Call for help **112**.
- Apply first aid.
- If the burn area is small, apply burn gel (BurnFree) to the region.
- Wrap a burn gel bandage (BurnRelief) around the burn area with larger burn areas.
- Provide emotional support.

11.2 EYE INJURIES

- Always have a first aid kit with you which includes eye wash solution.
- Consider all eye injuries as serious even if they seem to be minor.
- If dirt, particles or splinters get into the eye, rinse with eye wash solution.
- Avoid rubbing the eye with the back of the hand or knuckles.
- Have a healthcare specialist treat the eye.

INSURE SAFETY AT THE SCENE

11.3 HYDROGEN SULPHIDE H_2S

- Ensure safety at the scene.
- Call for help **112**.
- Only personnel with smoke mask equipment can save unconscious persons from a hydrogen sulphide filled environment.
- In geothermal plants there are respirators to put over the head of an unconscious person whilst rescuing them.
- Apply first aid.
- Take the victim to fresh air and let them rest, ideally in a sitting position.
- Give them oxygen if available. Administer breathing assistance if necessary.
- Keep the patient relaxed and keep them warm.
- Provide emotional support.
- If the gas comes into contact with the eyes then rinse with water.

11.4 ELECTRICAL ACCIDENTS

Basic rules:

- Turn off the electricity and ensure safety at the scene.
- Call for help **112**.
- Apply first aid.
- Provide emotional support.

Use a defibrillator if available in the event of a cardiac arrest.

If people have been injured and there has been an electrical outage, it is not permitted to reconnect the electricity without consulting the rescue party.

Electrical burns:

Electrical burn (contact): Electrical current travels through the body.

- Injury where the current entered and left the body.
- Internal injuries can be serious even if external injuries are small.

Arc burns (flash): During a short-circuit an arc flash can appear which can:

- Burn the skin.
- Welding blindness.
- Eye injuries.
- Burn the clothes.

Avoid the use of watches and metallic jewellery when working with electricity.

Electrical currents that travel through the body can cause:

- Heartbeat problems.
- Cardiac arrest.
- Burns.
- Other injuries.

MISHAPS CAN LEAD TO DISABILITY WHICH MAY BECOME APPARENT LATER

Electric shock

- Even a small electric shock can cause serious internal injuries even when external damage is minimal.
- All voltages higher than 50V can be dangerous when touched!
- When someone suffers a shock, the current enters the body at the contact area and is then conducted through the body where resistance is the least; through nerves and veins, bone marrow, tendons and muscles.

The extent of electrical injury depends on:

- If it is direct current or alternating current.
- How high the voltage is.
- Size of the contact area.
- Duration of contact.

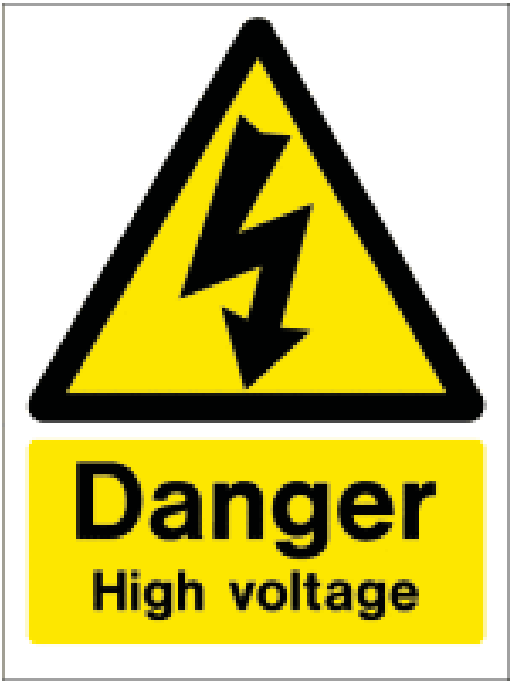
Electric shock response

- Shut off the electricity and ensure safety at the scene.
- Call **112**.
- Check breathing and pulse.
- Check neck and / or back if the victim has fallen.
- Preclude shock by lifting the victim's feet 20-30 cm and reduce heat loss with covers, both under and over.
- Cool the burn area with cold water for a minimum of 20 minutes and raise the water temperature slowly to 15-20°C.
- Dress the sore with a clean dressing.

Always consult a doctor if you suffer an electrical accident. Symptoms can occur later.

If one of the following has occurred, take the victim immediately to a hospital after first aid.

- Contact with high voltage.
- Contact with a lightning strike.
- Contact with low voltage resulting in a current path through the body.
- A loss of consciousness or light-headedness as a result of an electrical accident.
- Burn sores.
- Symptoms of nerve damage (for example paralysis).



HAVE RESPECT FOR THIS SIGN

11.5 ELECTRIC ACCIDENTS – FIRST AID

RÉTT VIÐBRÖGÐ VIÐ RAFMAGNSSLYSUM BJARGA MANNSLÍFUM

ER MAÐURINN Í SNERTINGU VIÐ RAFMAGN?

Ef svo er máttu alls ekki snerta hann með berum höndum. Rjúfðu straumin að manninum.

LÁGSPENNUSLYS: Takist ekki að rjúfa skalt þú einangra sjálfan þig. Notaðu gúmmívettlinga, gúmmísólaða skó eða stattu á einhverju þurru einangrandi efni. Reyndu að ná manninum úr snertingu við rafmagnið, t.d. með vogarafli.

HÁSPENNUSLYS: Ef ekki er hægt að rjúfa skaltu strax hafa samband við rafveitu og bíddu eftir skilaboðum um að búið sé að rjúfa og jarðtengja. - Varist hleðslustraum þótt rofið hafi verið.

Lykilatriði er að hringja strax í Neyðarlínuna til að fá aðstoð/leiðbeiningar.

Hlustið, horfið og þreifið eftir merkjum um andardrátt og hjartslátt. Ef sjúklingur andar og sýnir merki um blóðrás ber að leggja hann í læsta hliðarlegu.

Ef sjúklingur hefur ekki merki um blóðrás ber að hefja **hjartahnoð**. Hjartahnoði ber að beita þar til hægt er að gefa sjúklingi raflostsmeðferð. Beinir handleggir, flatur lófi, mitt bringubein, haldið takti með að telja eitthundraðogeinn, eitthundraðogtveir...

Tengja þarf sjúkling sem fyrst við **sjálfvirkt rafstuðtæki**, sé það til staðar, og beita rafstuðsmeðferð ef tækið gefur merki um sleglatif.

Ef ekki er hægt að beita raflostsmeðferð innan fimm til tíu mínútna þarf einnig að veita sjúklingi **öndunarhjálp** með munn við munn aðferðinni.

LÁGSPENNUBRUNAR: •Finnið og kælið brennd svæði með hæfilega köldu vatni þar til sársauki hverfur. •Notið votar grisjur ef fyrir hendi eru, og hyljið brunasárin með þeim. •Fjarlægið ekki klæðnað sem fastur er í sárum. •Gefið verkjalyf. •Má drekka. •Komið viðkomandi undir læknishendur sem fyrst, án þess að skapa hættu fyrir hann eða aðra í flutningnum.

HÁSPENNUBRUNAR: Oft alvarlegar skemmdir á vöðvum og innri líffærum. •Ef meðvitund er góð, skal gefa ríkulega af vatni eða öðrum vökva, allt að 1/2 lítra á klst. Bæta má matarsalti í vatnið, 1 matsk. í hvern lítra. •Gefið verkjalyf. •Kælið yfirborðssár. •Geymið þvag ef aðstæður leyfa. •Komið viðkomandi undir læknishendur sem fyrst.

LANDSPÍTALI · SAMORKA · VINNUEFTIRLITIÐ

11.6 RESPONSE PROCESS

1	Make sure that the area is safe
2	Call **112** ONE-ONE-TWO 
3	Start CPR immediately if the person is not breathing
4	Stop bleeding by applying direct pressure to the wound 
5	Rest and reassure the casualty

EMERGENCY SERVICE NUMBER – 112

11.7 FIRST AID

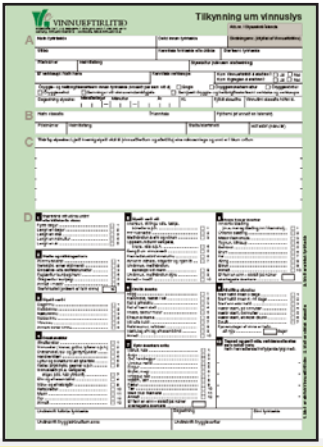
11.8 REPORTING ACCIDENTS AND MISHAPS

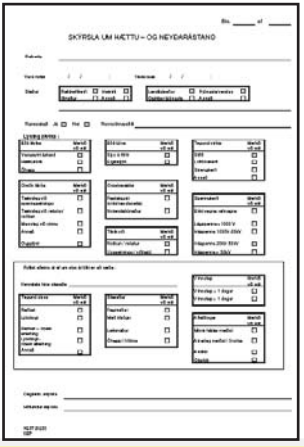
Employees shall see that all accidents and mishaps are reported. Serious accidents should be reported to the Administration of Occupational Safety and Health in Iceland.

- Keep evidence at the accident place for research purposes.
- Report accidents and mishaps to the RE safety warden and managers.

Accidents and mishaps shall be reported in the following manner:

- **Serious accidents** report to the Administration of Occupational Safety and Health and the Social Insurance Administration within 24 hours.
- **Other accidents** report to the Administration of Occupational Safety and Health within 14 days
- **Electrical accidents**, hazardous conditions, dangerous incidents and mishaps should also be reported to the Iceland Fire Authority.
- Accident reports can be found on the Administration of Occupational Safety and Health homepage.
- Reports on dangerous and emergency conditions concerning electrical accidents can be found on the Consumer Agency homepage.





12 EMERGENCY RESPONSE

12.1 EVACUATION PROCEDURE / ESCAPE ROUTES

- Become familiar with overviews of escape routes / evacuation of your workplace.
- Ensure that escape routes are not obstructed.
- Take part in drills.
- Find out the position of the assembly area.
- Become familiar with the response plan.

12.2 FIRES AND FIRE PROTECTION

Become familiar with:

- The correct response to fires.
- Positions of extinguishers and fire hoses.
- The use of extinguishers and fire hoses.
- Positions of fire alarms.
- The sound of the fire alarm.
- Escape routes.

.

Fire alarms

Employees should respond to the fire alarm in accordance with the evacuation procedure.

The basic response is:

- Let others know about the fire.
- Save others.
- Call **112.**
- Exit the building in accordance with the evacuation procedure or extinguish the fire.
- Don't use electrical equipment.
- Don´t compromise your safety or others.

Fire evacuation

- If there is smoke ahead then choose another route.
- Feel closed doors, if they are hot then choose another route.
- Close doors towards the fire, but don´t lock them.
- Choose the shortest clear way out.
- Never use an elevator in a fire.
- If you end up in smoke keep close to the floor, for example by crawling.
- Use a respirator if available.

DO NOT USE LIFT IN THE EVENT OF FIRE

Can’t get out

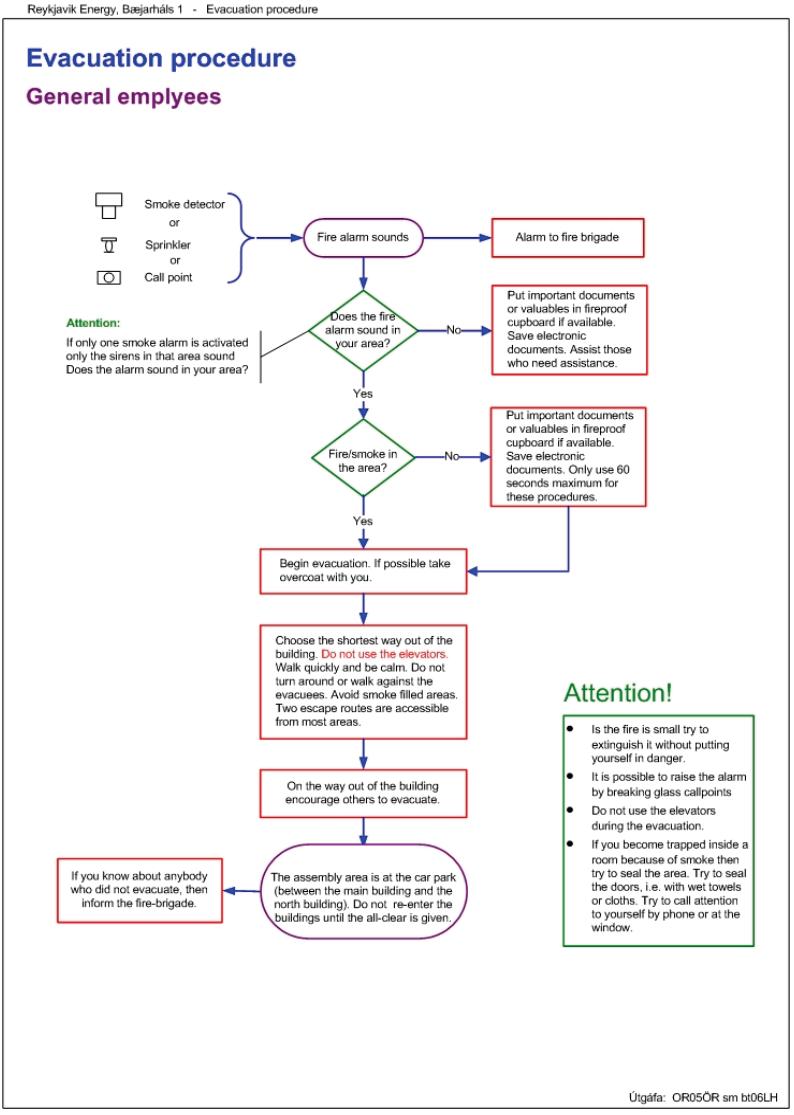
- Close yourself in a room away from the fire, preferably with windows.
- Let someone know:
  - Call the emergency number **112.**
  - Shout out of the window.
  - With banging and shouting.
  - Keep calm and wait for rescue.

After getting out

- Go to the assembly area or safe zone, don´t obstruct access at escape routes.
- Let someone know and share important information.
- Provide information about people that could be in the building.
- Don´t go back in until the fire brigade permits entry.

The fire triangle.

Evacuation procedure for general workers



Use of extinguishers

- Become familiar with the use of extinguishers.
- Don't direct the extinguisher at liquid if the liquid is flammable.
- Begin extinguishing at the base of the fire, up wind, and extinguish the fire before you with equal sideways strokes.
- Only use the amount of extinguishing substance that you need to put out the fire, keep the rest in case the fire ignites again.
- If the extinguisher has been used, inform the safety manager who sees that the equipment is refilled as soon as possible.
- Information about extinguishers can be found at www.shs.is

12.3 RESPONSE TO DISRUPTIVE ACTS

(Threats, vandalism, terrorism, sabotage)

Draw attention - stop – examine – protect – get assistance

- Be watchful of unusual circumstances / behaviour.
- Keep calm.
- Speak amiably and considered.
- Try and get as much information as possible (EBB-103).
- Don't put your life or health at risk.
- Document all information that could be useful.
- Notify your manager of the course of events.
- Direct the media to managers and / or the public relations officer.

Call for co workers assistance (emergency button on the phone) if a menacing customer comes to the reception at Bæjarháls 1.

12.4 EARTH QUAKES

Safety measures

Become familiar with safety measures and response to earthquakes at the Civil Protection Department homepage: www.almannavarnir.is and also in the phone directory.

- Position or fasten heavy items and equipment in a safe area.

If an earthquake is likely

- Let people know.
- Go to a safe area.
- Listen to announcements instructions which are given out on state radio and be on the look-out.

During an earthquake

- Leave the building or go to a doorway, to a corner of two load bearing walls, or under a table.
- Avoid items that could fall.
- If you are working at height hold tight until the earthquake passes.
- If you are working in a trench, leave it if possible. Otherwise you should stay in the middle of the trench, cover your head and keep the ground away from eyes, nose and face.

After an earthquake

Before re-entering a building, you should make sure there is no danger of collapse, leaks or broken glass or other debris.

If the building must be evacuated, leave the building avoiding objects that could fall.

If there is abnormal functionality in the lifts, then they should not be used until a qualified party has permitted their use.

12.5 VOLCANOES

Volcanic eruptions can begin without warning, but they are usually preceded by earthquakes that can be detected by seismograph. Become familiar with instructions at the Civil Protection Department homepage www.almannavarnir.is and in the phone directory.

Danger can arise from:

- Lava flows.
- Falling ash.
- Poisonous gasses.
- Lightening.
- Flows from eruptions under glaciers.

During a volcano you should:

- Avoid ash falls and steam that obscure your vision.
- Stay where the wind blows and do not go into low areas were gas can accumulate. The gas is a lethal poison, which in most cases has no smell and is difficult to detect.
- Choose the shortest way out of an ash fall by going across (width wise) the wind direction.
- Use a helmet and dust mask or a wet cloth other the nose and mouth.

13 VARIOUS INFORMATION

13.1 SAFETY SIGNS AND SIGNALS IN THE WORKPLACE

The workplace shall be supplied with health and safety signs. Learn their meaning and adhere to them.

Mandatory Signs require a response e.g. the use of safety gear

Hand protection must be worn

Eye protection must be worn

Safety helmet must be worn

Prohibition signs prohibit behaviour that can cause danger

No smoking

No unauthorized entry

No mobile phones

Warning signs warn of danger

Danger

Hot surface

Danger above

Emergency signs show the way to emergency exits, emergency equipment and rescue equipment

Fire extinguisher

Exit

First aid box

Rules governing the use of emergency sign can be found at www.vinnueftirlit.is

REGULARLY BRUSH UP ON THE RULES

13.2 EXAMPLES OF PERSONAL PROTECTION AND SAFETY EQUIPMENT.

Personal Protection

- Safety Helmets
- Hearing Protection
- Earplugs
- Safety Goggles
  - for dust and particles
  - for sparks
- Facemasks
- Respirators / masks
  - with dust filters
  - with air supplies
- Gloves
  - substance resistant
  - heat resistant
  - puncture resistant
  - to protect against vibrations
- Sleeve protectors
- Safety shoes/boots
- Knee pads

Personal protection continued...

- Slash protection
- Leg protection
- Crampons
- Protective vests
- Heat resistant vests
- Protective clothing
- Reflective clothing/ high visibility clothing (EN 471)
- Burn resistant /fire proof clothing (EN 531)
- Skin protection
- Welding protection
- Welding goggles
- Dust and carbon

Safety equipment

- Safety belts
- Life lines
- Fall lines
- Retractable Lifelines
- Safety frames
- Respirators
- Gas meters
- Life jackets
- Life buoys
- High voltage pliers
- Current gauge
- Avalanche whistle
- Rope gun
- Safety nets
- Eye rinsing equipment
- Defibrillators
- Smoke-mask equipment

13.3 IMPORTANT LINKS

- Comments and information: haraldur.haraldsson@or.is
- Laws concerning work environment, health and safety in the workplace nr 46/1980 can be found at the Administration of Occupational Safety and Health homepage.
- Regulation nr. 920/2006 concerning health and safety at the workplace can be found at the Administration of Occupational Safety and Health homepage.
- Regulations about worksite signage can be found at the Icelandic Road Administration homepage.

Chapter 4 Electrical Utilities

- Electrical safety management: www.neytendastofa.is
- Memorandum nr. 1/84: www.neytendastofa.is
- Regulations about worksite signage: www.vegagerdin.is
- Cable colour codes: www.samorka.is

Chapter 10 Health

- Health guidelines can be found at The Directorate of Health homepage.
- Information about nutrition and exercise can be found at The Public Health Institute homepage.
- Recipes can be found at the Sýnis homepage.
- Information about mental health can be found at The Public Health Institute homepage.
- Information about tobacco protection can be found at The Public Health Institute homepage.
- Information about alcohol and drug use can be found at The Public Health Institute homepage.
- Information about physical stress can be found at Administration of Occupational Safety and Health homepage.

Chapter 11 Accidents – response and documenting

- Information about first aid can be found at the on the Red Cross homepage.
- Response guideline to electrical accidents can be found at the Icelandic Energy and Utilities homepage.
- Announcements concerning work related accidents can be found at Administration of Occupational Safety and Health homepage.
- Reports about hazards and emergency conditions can be found at the Consumer Agency homepage.

Chapter 12 Emergency response

- Preventative measures and response can be found at the Civil Protection Department homepage.
- Instructions about the use of extinguishers can be found at the Capital District Fire and Rescue Service's homepage.
- Information about electrical energy system emergency collaboration (Neyðarsamstarf raforkukerfisins) can be found at the project homepage.

Chapter 13 Various Information

Regulations about health and safety signs can be found at the Administration of Occupational Safety and Health homepage.