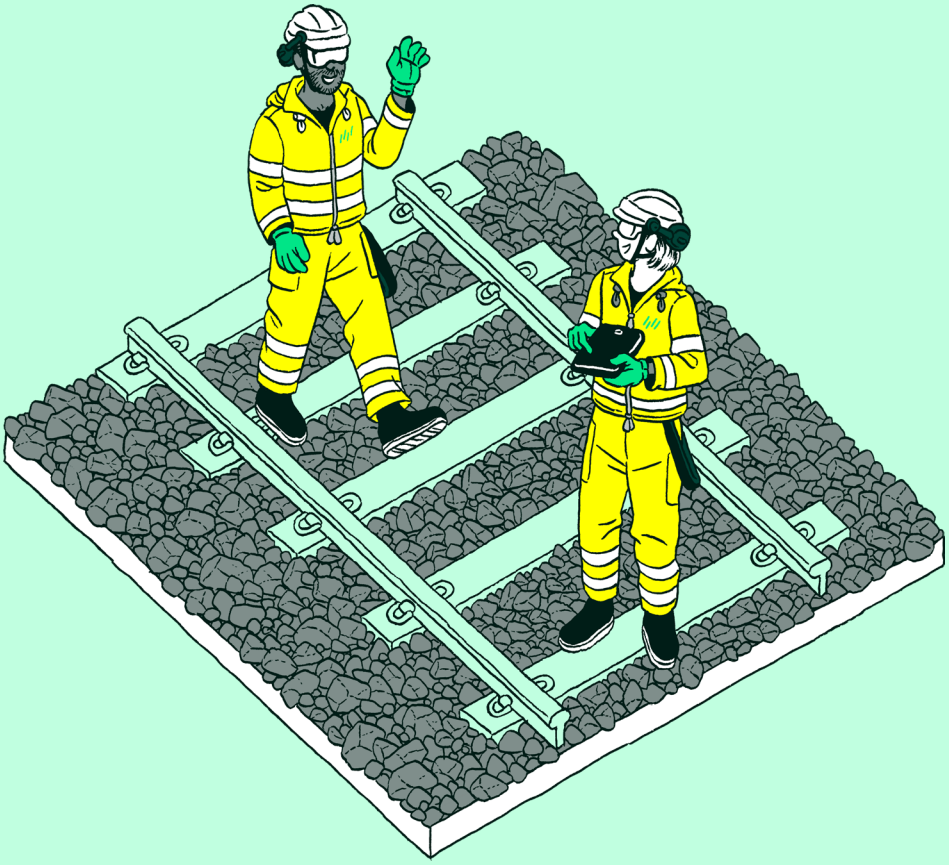
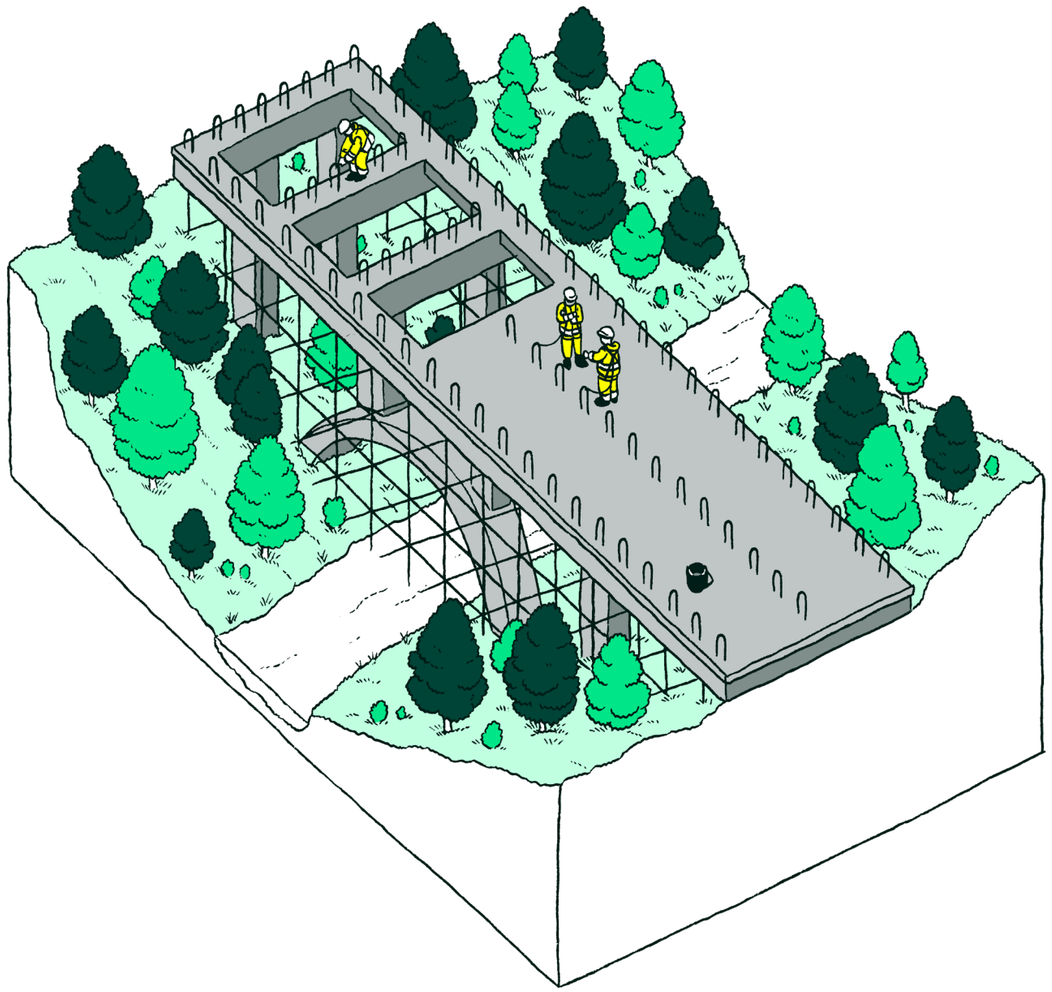
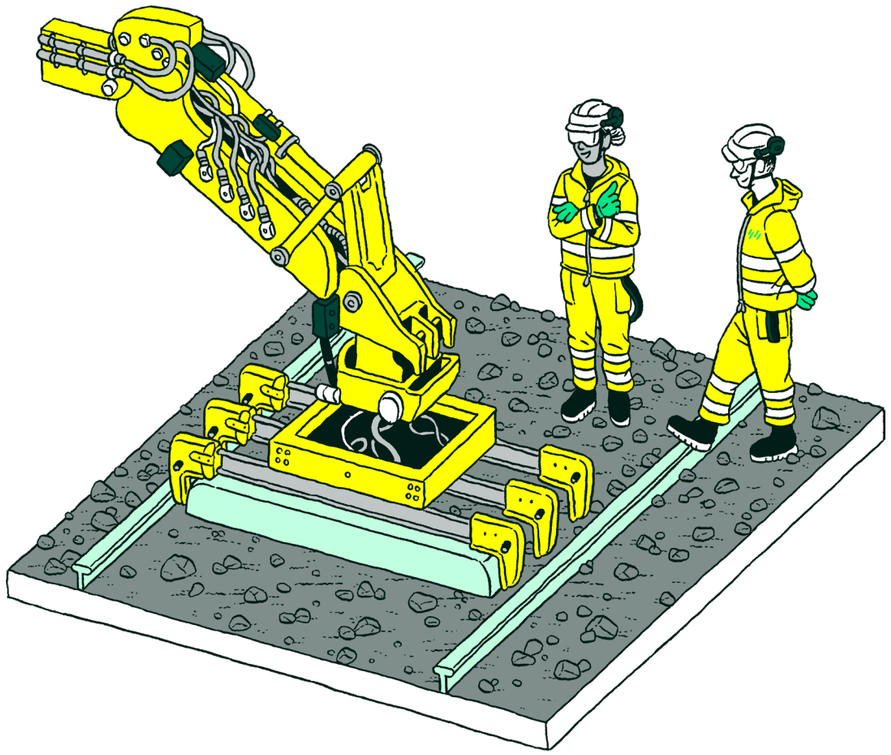


HSE MANUAL

NRC Group



CONTENTS



HSE PRINCIPLES

This manual is intended for those who work for us at NRC, either as an employee, contract worker or subcontractor. The HSE manual is a tool to help you understand the basic rules for our construction sites.

Everyone who works for NRC is required to familiarise themselves and comply with the content of the HSE manual.

HSE is the abbreviation for health, safety, the working environment, and the external environment. The idea is for this manual to be used as a reference guide for best practice and basic requirements.

NRC's responsibility as an employer is to facilitate and ensure the health and safety of all those who work for us. This is done by stating our common principles, systems, procedures and rules that apply to NRC as a whole.

Your responsibility as an employee is to speak up and show you care. Everyone has a duty to stop any actions or operations that may involve risk of injuries or unwanted incidents. You also have a duty to follow all rules and orders.

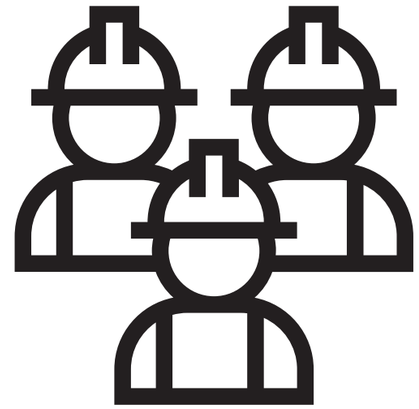
The safety representative has a duty to ensure that work is conducted safely and to report any dangerous conditions. The safety representative has a legal duty and obligation to bring a halt to any work that poses a risk to life and health.

The Project manager is responsible for all areas of the project. The HSE manager is the project's advisor for HSE matters.

A strong focus on HSE is created through the appropriate use of personal protective equipment, well-planned work tasks, compliance with established routines, active identification and management of all HSE risks, reporting of unwanted incidents, etc. This manual is an important contribution to this work and provides information about our HSE requirements for the planning and execution of work, and any conditions that may result in harm to health and the environment with preventive measures, first aid and emergency preparedness. For more detailed procedures, templates and checklists for our HSE work, see our management system, TQM.

PROJECT-SPECIFIC REQUIREMENTS

Be aware that the requirements for certain projects may be stricter than those described in this manual, for instance, related to personal protective equipment, barriers, etc. Project-specific requirements will either be stated in the project's HSE plan, NRC's instructions or in review of the risks associated with the planned work tasks.



NRC's primary intent is for everyone to get home safely after a workday.

1. Here, safety is our first priority.
2. Everyone must contribute to a good and safe working environment.
3. All managers must be involved and visible in HSE work.

POLICY FOR HEALTH, SAFETY AND WORKING ENVIRONMENT (HSE)

Our main goal in the area of health, safety and working environment is zero absences due to injuries. We will always work in compliance with prevailing laws, regulations, standards and other requirements for our operations.

Our working environment will contribute to the prevention of injuries and illnesses among our employees, contract workers and partners, and will be characterised by safety, well-being, job satisfaction and community.

If we are to achieve good results in our work with respect to health, safety and environment, everyone must be aware of their responsibilities and opportunities for influence. Our main principles for environmental management are stated in our environment policy.

Main principles

1. **Here at our workplace, personal safety will always come first.**
2. **Everyone must contribute to a good and safe working environment.**
3. **We will facilitate the safe execution of work tasks.**
4. **We will be an organisation based on learning.**
5. **We will work systematically with health, safety and the working environment.**
6. **We will ensure close follow-up of our partners and suppliers.**
7. **We will have good routines to protect our locations.**
8. **We will reduce the consequences of an accident if it occurs.**

POLICY FOR THE ENVIRONMENT

We will make continuous efforts to minimise our impact on the environment in compliance with prevailing laws, regulations, standards and other requirements in place for protecting the external environment.

Main principles

1. **Management will promote environmental awareness in the organisation.**
2. **Everyone has a responsibility and must adhere to the principle of precaution.**
3. **We will reduce our greenhouse gas emissions.**
4. **We must always consider the use of the appropriate competency based on the project's environmental challenges.**
5. **We will have focus on waste reduction, waste sorting and reuse.**
6. **We will learn from our unwanted incidents.**
7. **Our purchases will be sustainable.**
8. **We will reduce the consequences of unwanted incidents if they arise.**
9. **All our projects will include a focus on the environment from day one and throughout the project.**

HSE OBJECTIVES FOR NRC NORWAY

Definitions

H1 value: Expresses the frequency of absences due to injuries, serious personal injuries and serious personal injuries that are permanent, per million work hours.

H2 value: Expresses the frequency of work accidents that require medical treatment and/or alternative work (total number H1 and H2 injuries per million work hours).

Sick leave absence: Absence from work due to illness (%).

RUI rate: Number of RUIs per FTE.

M value: Harm to the external environment that cannot be restored within one month after the incident.

Sorting rate: The amount of sorted waste divided by the total amount of waste.

H1 value = 0

H2 value < 7,5

Sick leave absence < 3,4

RUI rate > 5

M value = 0

Sorting rate > 90%

SAFE JOB ANALYSIS (SJA)

The safe job analysis (SJA) is our most frequently used planning tool for removing or reducing HSE risks. Using SJA, we can find the safest and most suitable method of executing a work task.

Everyone who participates in a work operation can request an SJA for the work. Everyone who will be participating in a work task must be involved in an SJA, or at least be given a thorough review of this before starting the task. Any new risk factors that arise during the review must be incorporated in the SJA.

The most important elements of an SJA:

1. **Assess the partial activities that are involved in a work operation.**
2. **Assess risk factors: What can go wrong?**
3. **Assess any causes: Why can this go wrong?**
4. **Assess risk-reducing measures. How can we prevent this from going wrong?**
5. **Define the responsibility for barriers that would prevent it from going wrong.**

MORNING MEETING

HSE will be a regular topic at all daily morning meetings. This is to ensure that everyone is aware of the work operations of the day, the risks associated with these, and how they can be executed safely.

Topics may include:

- Determine whether you have the resources you need to perform the work safely, e.g. security guards, traffic guards, competent personnel, etc.
- Determine whether we have what we need in terms of necessary material, equipment and tools to perform the job safely and professionally.
- Clarify the need for SJA.
- RUIs for the last period.
- Deviations from HSE rounds.
- Mass management.
- Assess the need for checklists.

HSE ROUNDS

An HSE round is a preventive HSE activity aimed at preventing unwanted working environment conditions from arising, identifying any risk factors and ensuring the improvements are carried out. An HSE round is a practical tool for getting an idea of the conditions and activities taking place in the project or in the company. HSE rounds are led by HSE personnel or operations management at the site, and the safety representative and management will participate in its implementation. Subcontractors can participate whenever they are represented.

Deviations uncovered during HSE rounds must be followed up, and the HSE protocol will state who is responsible, as well as the deadline for closing the case. The leader of the HSE round will follow up and ensure that the deviations are closed by specified deadlines. The HSE protocol must be accessible and hung in a clearly visible spot in the barracks/offices.

REPORTING UNWANTED INCIDENTS (RUI)

Everyone has a duty to report unwanted incidents related to health, safety and environment, regardless of their area of responsibility. Whoever uncovers an unwanted incident must assess whether it is necessary to implement immediate measures to prevent the incident from recurring, or to prevent a more serious incident.

NRC primarily uses an app or QR code to report incidents and management, however, you may also use the RUI form to report unwanted incidents.

Industry experience shows that a higher rate of reporting leads to fewer accidents. This is due to better awareness and focus on following routines and regulations to avoid dangerous situations. Reporting unwanted incidents is a simple and vital measure, and we expect all our employees to use this actively. No one should experience negative feedback or consequences as a result of their reports.

The information NRC receives about reported incidents are actively used in HSE work at the company to uncover areas for improvement.

The following incidents must be reported through the Incident Management System:

1. Near accidents
2. Accidents/Incidents
3. Environmental incidents
4. Quality deviations
5. Suggestions for improvement
6. Positive feedback

PERSONAL PROTECTIVE EQUIPMENT (PPE)

NRC is legally required to provide suitable personal protective equipment and make this available to its employees. The type of equipment that is appropriate depends on the type of work operation to be performed. NRC has defined the following personal protective equipment as a minimum requirement, i.e. essential personal protective equipment regardless of the type of work to be performed for the company.

COMMONLY ASKED QUESTIONS ABOUT PERSONAL PROTECTIVE EQUIPMENT (PAGE 122)

Standard personal equipment for employees with Gunnar Knutsen AS:

High-visibility clothing with visibility class 3

Protective footwear above ankle height

Personal protective equipment that should be available in vehicles/machines and used during work outside the vehicles:

Helmet with chinstrap
White helmet: Employees
Green helmet: Safety representative

Hearing protection in the helmet

Gloves for manual work
min. cutting class B

Safety glasses

Standard personal protective equipment with NRC Kept AS and on railway and construction projects with NRC Norway AS:

Helmet with chinstrap
White helmet: Employees
Green helmet: Safety representative

Jacket/vest in visibility class 3 *

Trousers in visibility class 2 *

Protective footwear above ankle height

Hearing protection in the helmet

Gloves for manual work
(min. cutting class B)

Safety glasses
Exception: while operating trains and work machines, machine operators inside machines, drivers on rails or in road machines while inside the machine, vehicle driving and other exceptions subsequent to the preparation of risk analyses or safe job analyses that are approved by the manager.

* Requirements for multi-norm workwear on track projects. This means that the workwear should comply with EN ISO 11612 (flame-resistant) and EN 61482 (electric arc).

Other protective equipment that should be used if required by the work operation:

Safety mask/respiratory protective equipment

Safety vest

Headlamp

Protective footwear and other protective clothing

Fall safety equipment

SEE THE TABLE OF CONTENTS

HSE CARDS

Everyone who works for NRC and who spends time at NRC's construction sites must have a valid HSE card that shows who they are and what company they work for. HSE cards must always be worn and clearly visible at work. The card must be returned to your employer when you no longer work for them, or when the status of the card is no longer valid. The HSE card is valid for 2 years.

Exceptions: Accompanied visitors from the project organisation. E.g. consultants or neighbours on a guided tour.

ORDER AND CLEANLINESS

Our workplaces and construction sites must be tidy and orderly. All material and all tools must be put back in their place after use.

Good order and cleanliness helps to:

1. **PREVENT ACCIDENTS AND INJURIES**
2. **Prevent (or limit) fire**
3. **Ensure good hygiene**
4. **Ensure better economics for the projects**
5. **Reduce the likelihood for environmental pollution**

VIOLATIONS OF HSE REGULATIONS

Violations of the HSE regulations, will have the following consequences:

Verbal warning with the exception of less serious violations and for a first violation. Verbal warnings must be confirmed in writing.

Written warnings are issued for serious violations or for repeated violations subsequent to previous verbal warnings. Written warnings will be presented at a meeting with the Project Manager, Site Manager or HSE Manager.

Termination or dismissal may be necessary in the event of repeated and/or serious violations of internal requirements and prevailing laws.

SAFETY

NRC Norway has a number of work instructions and routines where secure and established procedures for performing the work are described. These documents determine how we should work, and they will be revised when better and safer procedures are identified.

Work instructions describe how the work should be performed, what safety routines should be followed, as well as the responsibilities and authority associated with the work task.

Our procedures involve specified routines for performing an activity or work task.

Necessary training will be initiated before starting the work.

Anyone who is doing work for NRC Norway must have received sufficient training before the work can begin. The manager who is responsible for the work must ensure that those doing the work have the necessary training before the work begins.

Certain machines and equipment require certified safety training. Other work equipment that requires special caution for use require documented safety training.

WORKING AT HEIGHTS

Working at heights is a work operation where employees can fall. We define this as work 2 meters above the ground.

Working at heights must always be risk-assessed, and manual work at heights should be limited. A safe job analysis (SJA) must be performed before any work at a height can begin. Collective protective measures such as railings, scaffolding and lifts must be prioritised over personal fall safety equipment.

A safety harness or other safety restraint must be used for work exceeding 2 meters when collective protective measures are not feasible.

Ladders

Ladders should only be used for temporary access. In certain circumstances, ladders may be used under additional supervision if:

- The work will take less than 30 minutes.
- It is not appropriate to use other more secure work equipment.
- The risk is considered low and/or the conditions at the worksite cannot be changed.

Ladders must be secured at the top or bottom, or be held steady by another person. The maximum permitted length of a ladder is 6 m, whereby 1 m must extend beyond the roof or platform when the ladder is used for temporary access. The ladder that is used must be set at an angle between 65˚ and 75˚.

Scaffolding

Prior to use, all scaffolding with work platforms above a height of 2 m must be inspected by qualified personnel and bear approval signage. Scaffolding with work platforms above 2 m must have handrails fitted at a minimum height of 1 m, a railing at knee height, and a foot railing. This also applies if the distance between the wall and the scaffolding is greater than 30 cm.

Netting, tarpaulin or a screen must be used to protect those below from falling objects. The scaffolding must have secure and appropriate access. Waste materials, building materials and equipment must not be stored on the scaffolding. **The user of the scaffolding must have training in the use of scaffolding.**

Mobile scaffolding can only be used on firm, level and horizontal surfaces. When working on mobile scaffolding, all wheels must be locked. It is not permitted to stand on the scaffolding when it is being moved. Objects on the scaffolding must be removed or secured against falling when the scaffolding is moved.

Mobile work platforms/ personnel lifts

All operators of personnel lifts must have completed documented safety training for this type of equipment. In addition, they must have completed product-specific training for the lift they use. Product-specific training must at the very least involve a thorough review of the safety devices and restrictions on the lifting device.

When moving or leaving a scissor lift or boom lift, neither device should remain in a lifted position. When using a boom lift, the person in the basket must be secured with a fall safety harness. **Cranes and lifting equipment must not be used for personnel transport.**

TRENCHES AND SLOPES

Work in trenches and slopes is associated with the risk of land- or mudslides and must be performed in accordance with the requirements stated in the Regulations concerning the Performance of Work, Chap. 21. Excavation work All excavation work must be performed in a safe and secure manner, and there must always be safe access to the excavation pit.

Be extra vigilant for falling debris or mudslides in trenches, slopes and mountainsides, during changes in temperature from frost to warmer weather.

EXCAVATION PLAN
A plan for the excavation work is required when digging deeper than 1.25 m. The plan must be based on a completed evaluation and risk assessment.

TRAINING IN EXCAVATION AND WORKING IN TRENCHES
Work in deep trenches, ditches and shafts is considered hazardous work. All personnel who are involved in excavation work, whether they are excavator operators or plumbers who are working in the trench must therefore have the necessary training in this work. Personnel who are digging deeper than 1.25 m must have special training in excavation work.

1. A professionally qualified person must calculate the dimensions of support walls for trenches and shafts deeper than 2 m. These calculations must be documented.
2. For trenches shallower than 2 m, vertical support walls may be used to secure the sides, unless other hazards are present. For trenches that are not supported, the sides must have an appropriate slope angle.
3. Excavation masses must be placed such that they do not slide or cause a collapse, and no closer than 1 m from the trench. Ensure that there are one or more escape routes.
4. In trenches that are deeper than 1 m, ensure that there is always one or more escape routes.
5. When leaving the work site, be sure to set up a railing or other appropriate barrier if there is a risk that someone could fall into the trench/ excavation pit.
6. Be particularly cautious when excavating on or near vehicle routes.
7. Inspections of excavation pits or trenches must be conducted before the work begins and throughout the excavation period.

CRANES AND LIFTING EQUIPMENT

All cranes and lifting devices must be inspected by a professional technician at least once a year. Certificates must always be kept ready accessible.

All lifting and operations involving the risk of falling objects must be set up in a safety zone, in which all personnel and vehicle traffic is prohibited. The extent of the safety zone must be defined in an SJA. Cranes and lifting equipment must be situated and used in a manner that ensures a safe distance between the crane and live outdoor power lines.

Lifting equipment, colour code year:
Approved lifting equipment must be marked with the colour code year.

2024 2025 2026 2027

Hoisting

1. **To be permitted to hoist materials, you must document that you have undergone a training/hoisting course** (cf. Regulations concerning the Performance of work).
2. **Do a visual inspection of the lifting equipment before use.**
3. **Ensure that lifting reference tables are available for the relevant lifting equipment.**
4. **When lifting long objects, use two straps, as well as a control line, if necessary.**
5. **Check the balance of the strapped objects when the load is raised from the ground.**
6. **If radio communication is used between the hoist operator and crane driver, keep your communication brief and precise. If anything is unclear, request confirmation.**
7. **Give clear and correct signals when directing a load. Agree on the type of signalling with the crane driver in advance.**

Mobile work platforms/personnel lifts

1. Cranes and lifting equipment must not be used for personnel transport. Only approved personnel baskets for cranes and wheel loaders can be used for this purpose.

2. All operators of personnel lifting devices must have completed documented safety training for this type of equipment. In addition, they must have completed product-specific training for the lift they use. Product-specific training must at the very least involve a thorough review of the safety devices and restrictions on the lifting device.

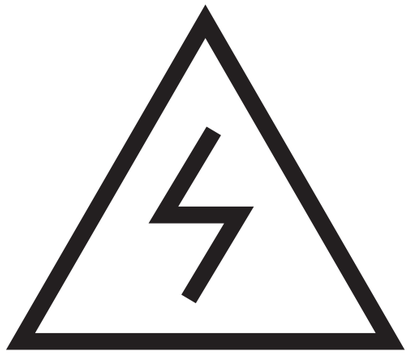
3. Scissor lifts must not be left in a raised position when being moved or standing unused. When using a boom lift, the person in the basket must be secured with a fall safety harness.

WORKING ON OR CLOSE TO TRACKS

When working on or close to tracks, follow the guidelines issued for this work, including orders issued by the chief safety officer, local safety officer, and the manager for electrical safety.

Important to remember:

1. **Trains may approach at high speed.**
2. **Trains may have a braking distance of more than 1 km.**
3. **Extra trains may approach without warning, and at high speed.**
4. **Noise from work machines etc. may “mask” noise from approaching trains.**
5. **Never trust only your own hearing.**



ELECTRICAL RISKS

Cable location

Before excavation is started in areas where it is expected that buried cables may be found, the network owner must be contacted for cable location (this applies to all types of cables, including low voltage, fibre and signal cables, and audio/video systems).

Low voltage cables, excavation below cable markings or sub cable excavation must be carried out manually, by hand. The network owner must be contacted if it is necessary to excavate within the stipulated safety distance for high-voltage cables. For all excavation in Bane NOR's area, cable location must always be carried out prior to excavation work.

Working on or close to electrical systems

In accordance with regulations pertaining to safety when working on and operating electrical systems, the work carried out on disconnected systems, live systems and close to live system components must be adequately planned. The necessary safety measures must be implemented in order to avoid injury or harm to life, health and materials. When working on or close to electrical systems, it must be entirely clear as to who is responsible for the planning, establishment, management and implementation of safety measures at the worksite.

For high-voltage systems, this would be the Safety Supervisor. For low voltage systems, an authorised person together with the Work Supervisor is responsible for safety initiatives. Those who are responsible must ensure that activities are carried out in a safe and appropriate manner and in accordance with safety regulations.

High-voltage systems

Arcing (flashover) of dangerous voltage from high-voltage lines, such as to a crane or wire may occur without direct contact with the line. If arcing occurs, no one must touch the affected machinery. The driver must remain seated in the driver's seat until the line has been disconnected and the owner of the high-voltage line has given the clear signal for evacuation.

The owner of the high-voltage system (network owner, Bane NOR etc.) must be contacted when work is to be performed closer than 30 m from the high-voltage system. The owner must decide which initiatives are necessary in order to gain permission for this type of work. High-voltage lines must only be handled by qualified electrical personnel. For work within the zone of the contact wire (6 m) special restrictions will apply, in accordance with Bane NOR's regulations.

HOT WORK

Hot work must only be carried out by certified competent personnel. Hot work may involve welding, the use of angle grinders, flame cutters, or other work that produces open flames, heat or sparks. Hot work must be conducted in accordance with requirements stipulated in the Regulations concerning the Performance of Work, Chapter 5, Hot work.

When welding, cutting, burning, soldering, sanding and grinding, materials are warmed up and change their properties. This releases hazardous biproducts in the form of dust and gases. These substances can have a negative impact on health in the short or long term, with potential serious and chronic diseases.

Pay particular attention to the following:

- The workplace and immediate area must be cleared of all flammable waste materials.
- Necessary fire extinguishing equipment must be readily available, with a minimum of 2 x 6 kg ABC fire extinguishers.
- Close fitting eye protection, gloves and full-coverage flame retardant workwear must be worn when grinding, welding and cutting.
- Hazardous gases and particles are released when hot work is performed on painted surfaces. Respiratory protective equipment, preferably an open circuit apparatus, must therefore be used for this work.
- Use alternative work methods, such as cold cutting, if possible.
- Use a dust collector if available, or consider installing a dust collector.
- Wear a mask with a proper filter or use an open circuit respirator mask.
- Change the filter regularly and ensure good maintenance of the masks.
- When burning painted surfaces, wear an open circuit respirator mask.

WORKING IN TUNNELS

Tunnels and other spaces in a rock cavity can often be cramped, dark and damp. Dust and noise can also have a negative impact. When working in a tunnel, it is essential that the ventilation systems ensure a sufficient supply, while the concentration of dust and toxic gases must be kept below the limit values. Gas monitoring is therefore done in the tunnels. Personal respiratory protective equipment must be worn whenever known high-risk work tasks are performed.

It is always crucial to know who is inside the tunnel whenever tunnelling work is performed. It is your responsibility to ensure that you are registered when going in and out of the tunnel. Before work in the tunnel can begin, you must be informed of emergency preparedness measures and escape routes. You must also check all communication equipment to make sure it works and ensure that your leader has been notified of your presence and that of your work team.

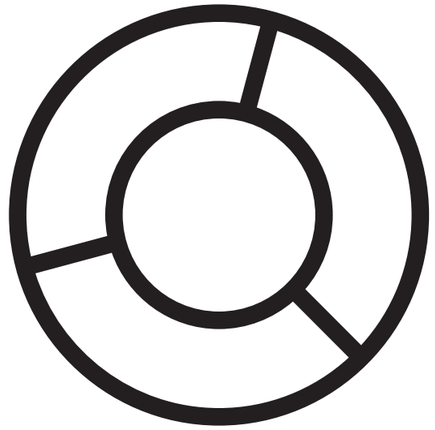
A minimum of two people must be working at the same time when performing work in tunnels. When several construction machines are operating at the same time, one vehicle must always be dedicated to the evacuation of you and your colleagues.

Essential information for tunnelling work includes:

- → Information on PPE
- → Escape routes
- → Information on the use of emergency equipment
- → Description of measures in emergency situations

WORKING NEAR WATER

When working near water, it is always necessary to ensure sufficient personal buoyancy equipment. Anyone who works or spends time closer than 2 m from the quayside, wharf or near water that involves a risk of sinking or being caught in the water must wear a life jacket or other floatation device. Machines and equipment must always be inspected before starting the work to prevent leakage and subsequent pollution. When using a boat, all wind and weather conditions must be assessed before embarking on the trip. Work performed from the boat should be avoided as far as possible. Barges are preferred due to their stability. When transporting cargo or masses by sea and on lakes, make sure to secure the cargo to avoid loaded displacement, which could lead to capsizing.



WORKING ON OR NEAR VEHICLE ROUTES

Anyone working on or near a vehicle route must ensure that necessary measures have been implemented before the work begins. A signage plan must be produced for work performed along highways, county roads or municipal roads, and signs must be set up before the work begins.

In any case, the safety of those performing the work must be ensured at all times.

Information on roadside work:

1. Anyone working on or near a road must have completed the Works Warning and Security Plan course 1 (or 2).
2. Anyone remaining on or near a road must wear approved reflective workwear.
3. Flashing lights should be used as needed to enhance the warning.
4. Rerouting of road traffic must be regularly assessed.
5. Pedestrians and cyclists must be kept out of the work area.

TRAFFIC SAFETY

Accidents involving machines and vehicles constitute a major risk at a construction site. Vehicles and machines at construction sites have considerable blind spots. Be aware of the blind areas, stay focused and maintain a good overview. Keep your distance from machines and wait for eye contact and a signal from the machine operator before entering the work area. The machine operator must always have a driver's mate present to assist in reversing whenever there is a risk of an accident.

Traffic rules also apply at the construction site!

Important information for avoiding accidents with machines at the construction site:

1. **See and be seen.**
2. **Establish eye contact when you approach a machine and be clear when signalling the operator.**
3. **Do not approach or walk around a machine without securing eye contact.**
4. **Use high visibility workwear (minimum class 3/2 for jacket/vest and trousers, respectively).**

Use of mobile phones

The use of mobile phones when operating machines is prohibited when the machine is moving. For mobile phone use in a car, hands-free devices must be utilised whenever the car is in motion. The use of mobile phones at construction sites is discouraged. If you must use your mobile phone, be sure to remain in a safe zone.

ACCIDENTS INVOLVING MACHINES

For managers:

1. I always ensure that participants in the project are well informed of the machines' blind areas.
2. I ensure safe walkways at the construction site.
3. I have ordered the use of a driver's mate when reversing, if there is a risk of an accident.

Lifesaving for employees:

1. I stop at least ten metres from machines, and I wait for eye contact and a signal from the machine operator before entering the work area.
2. I have informed my colleagues of machines' blind areas.
3. I always have a driver's mate to assist in reversing whenever there is a risk of an accident.

SECURING LOADS

It is important to secure loads to avoid accidents, and as a driver of a vehicle, you are responsible for ensuring that objects are appropriately secured. In the event of an accident or emergency braking, unsecured objects will be thrown forward and can potentially cause major damage.

The following requirements apply to securing loads:

1. Freight may NOT be placed in a way that reduces the driver's visibility and prevents sufficient manoeuvrability.

2. Freight must be secured to prevent damage or risks from falling off the vehicle, dragging along the road or creating unnecessary noise. The same applies to chains, ropes, tarpaulins or other fastening devices.

3. Freight that creates dust or smoke, or that swirls around the vehicle should be wetted and covered with a tarp or secured in some other fashion to prevent it from falling off the vehicle during transport.

4. During transport, freight carried by the vehicle must be secured so that the freight is not displaced and does not fall off.

5. Freight should be secured, either by being locked, closed or roped, or by a combination of these methods.

WORKING IN TANKS

Accidents due to work in tanks can have serious consequences. Working in tanks involves the risk of suffocation due to lack of oxygen, exposure to hazardous gases, fire and explosions.

Before starting work in a tank, the work area must be inspected and secured. Hoses and equipment must be placed in the appropriate area and must not present a danger to or obstacle for others. Cluttered areas should be marked with barricades, signs or barrier tape. All joints and couplings should also be checked for leaks before starting the work.

A minimum of two people must always be working together in a tank or closed room, where at least one person should remain in a safe zone. This person must have immediate access to life-saving equipment, such as a tripod. The person who enters the tank or a closed room must wear a safety harness and be connected to the person in the safe zone. The oxygen level (21%) inside the tank must always be checked before entry.

WORKING WITH ASBESTOS-CONTAINING MATERIALS

The demolition and removal of materials that contain asbestos is referred to as asbestos remediation. This also includes the handling of asbestos-containing waste from such work.

Only personnel with special training and health monitoring can perform asbestos remediation. The company they work for must also have permission from the Norwegian Labour Inspection Authority to perform work with asbestos. Regulations stipulate how asbestos remediation should be planned and implemented in order to avoid exposure.

It is the responsibility of the asbestos worker to barricade the area so that everyone outside the barricade can move around freely.

SEE THE TABLE OF CONTENTS

WORKING ALONE

Personnel who are working alone at a site are referred to as lone workers. Here, the only opportunity for contact with others is through the use of a communication device. Before starting lone work, the manager and employee together must perform a risk assessment or safe job analysis to identify high-risk aspects of the work and describe necessary preventive measures.

If the work is considered to involve risks that are so high that an injured person would not be capable of using a communication device, the work should not be performed alone.

Risk factors that are generally accepted in private life, such as the risk of driving a vehicle alone, would under normal conditions also be accepted in a work context.

Examples of assistance devices for lone workers that reduces risks, as the injured person can call for help:

1. Phone
2. Two-way radio
3. Alarm system
4. Mobile emergency stop

HANDLING OF GASES

The use of gases requires knowledge, caution and respect. In unauthorised hands, gas can be dangerous. With respect to safety, it is essential to know the following:

1. **Whether you have the correct gas for the purpose of your work – as the wrong gas can be highly dangerous.**
2. **Whether the gas is flammable or toxic.**
3. **Whether there is a danger of suffocation, increased risk of fire, or an explosion in the event of leakage.**
4. **Whether the equipment is working properly, and you know how to use it.**

Gas must be stored in a suitable place with appropriate signage. Flammable and/or toxic gas must never, under any circumstance, be stored in a cellar or room/container without ventilation.

Oxygen tanks must be stored a minimum of 8 m from tanks of flammable gases for storage outdoors. Gas should be stored in approved containers. Personnel should otherwise follow the regulations for hot work and hazardous substances.

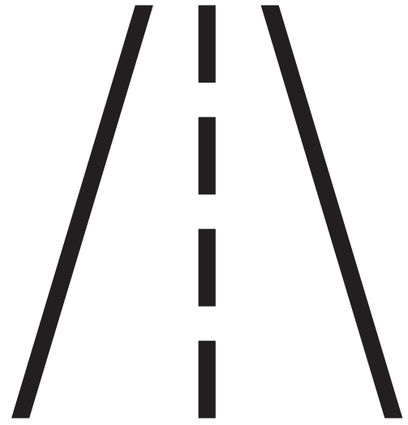
In the event of fire, the following measures must be implemented:

1. **Notify local fire services immediately.**
2. **If possible – remove the gas tanks from the area that is at risk of fire. This should be done at an early stage without risks for the parties involved.**
3. **If gas tanks cannot be removed, they must be cooled with water. The area must be evacuated. Fire- or heat-exposed tanks pose a significant risk. The safety zone around a site where acetylene cylinders are exposed to fire or heat is 300 metres.**

WALKWAYS

NRC will plan and establish safe and appropriate walkways at the plant. Walkways must be clear, highly visible and marked whenever necessary. Walkways must always be clear of tools, materials and waste.

If there are risks involved, the walkways must be secured with railings or other appropriate measures, and lighting will be installed. During winter, the project must ensure routines for snow clearing and salting along the walkways.



HEALTH AND WORKING ENVIRONMENT

Ailments and illnesses due to participation in working life may arise subsequent to negative exposure over time. The employer is required by law to assess the risks of all types of exposures, and to implement measures to ensure that employee health is not negatively impacted. Employees must cooperate with the employer on this issue. If other measures do not reduce the exposure to an acceptable level, the necessary protective equipment must be used.

Our occupational health services can assist with guidance and advice on both the physical work environment and the psychosocial/organisational work environment. Occupational health services also conduct periodical health checks, which certain clients require.

Smoking and use of snus

Smoking is prohibited on NRC's premises, and in our vehicles and machines. This includes e-cigarettes/vaping, both with and without nicotine.

- **Smoking is only permitted at designated sites.**
- **Empty snus pouches must be disposed of in suitable waste containers.**

Various sources of pollutants in the working environment

Noise in the working environment

Is defined as unwanted noise and can be divided into two categories:

- **Irritating noise from e.g. ventilation systems, PC fans and similar items.**
- **Harmful noise from a noisy environment > 80dB and impulsive noise > 130dB (typical for a construction site).**

Noise levels are measured in decibels (dB). An increase of 3dB corresponds with a doubling of the noise level. A noise level above 80dB involves the risk of hearing damage, and measures must therefore be implemented. Hearing protection must be used if other measures do not have an adequate effect.

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The noise level is not the only factor that determines whether the noise is harmful. The duration of the noise and the frequency with which a person is exposed to it is also important. Therefore, noise is measured over time, but it is also important to consider the peaks of the impulse noise when implementing measures.

Always consider the following conditions:

1. **Are there alternative work methods that would reduce noise exposure?**
2. **Can the distance to the source of noise be increased?** (a doubling of the distance will reduce the noise level by 6dB)
3. **Is the right type of hearing protection being used?**
4. **Can the exposure time be reduced?**

Dust in the working environment

Dust can affect the membranes in the airway and lead to acute ailments such as bronchitis and pneumonia. In the long term, breathing in dust can lead to chronic lung disease.

If there is a high concentration of dust in the air, measures must be taken to avoid or reduce dust problems. Relevant measures may include regular watering, or the use of other dust binding methods. If it is not possible to reduce the concentration and dust in the air to an acceptable level, respiratory protective equipment must be used.

Vibrations affecting the employee

Hand and arm vibrations occur when using vibrating, handheld tools. The use of these tools involves a risk of damage to blood vessels, nerves, muscles and joints. Symptoms of health damage include recurring attacks of white and numb fingers, pain and reduced hand strength.

The level of vibration determines how long these types of tools can be used each day. All tools should be marked with a maximum usage time. When using several different types of vibrating tools each day, it is the total sum of these vibrations that places limits on the length of their use. If you cannot find information about the vibration level, this can be measured. Occupational health services have metering equipment for this purpose.

It is primarily machine operators that are exposed to full body vibrations at NRC. This can lead to back, neck and shoulder problems. Level surfaces, a good driver's seat/cabin and focus on speed and driving style are the most important measures for reducing full body vibrations.

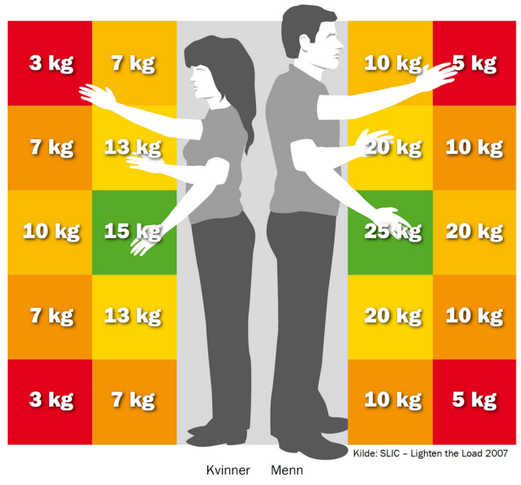
Manual labor

Ergonomics and Work Posture.

In order to prevent problems, you must use your body correctly. Work tasks that involve heavy and monotonous work over time, unilateral/strained working positions and extreme time constraints are particularly harmful. Ensure that you use the most appropriate tools for the task and organise tasks as much as possible in the most efficient order so that your work has some variation.

While performing heavy lifting you should use the muscles in your legs and abdomen. Bend your knees and keep your body in a vertical position when you begin lifting. Lift the object as close as possible to your body. Holding the object close to your body will considerably reduce much of the strain on your spine.

Heavy lifting should, as far as possible, only be done when necessary and when tools or aids are not available. It is never recommended to lift weights over 25 kg (men) and 15 kg (women) in an upright position, and the recommended weight limit for heavy lifting decreases with distance from the body's center.



Assessment Model for Recommended Weight Limits for Lifts in Standing Position. Source: arbeidstilsynet.no

Gases

Some types of gases may cause acute health problems, while others may lead to illness over time. There are both flammable and/or odourless gases. Gas meters are used to detect the presence of gases. Always try to reduce your exposure to gases.

Typical working environments and work assignments where you may be exposed to gases include:

- **Hot work**
- **Tunnel work**
- **Blasting work**
- **Work involving chemicals**
- **Working in tanks and enclosed spaces**
- **Work near emissions from combustion engines**
- **Working in areas where biological material is being broken down (typically in construction trenches and excavations on previously excavated sites)**

Chemical products

Some chemical products pose an extreme health hazard. A record of substances and products with data sheets must accompany the products as long as they are in use, and all projects must have an electronic record of substances and products.

When using substances that are marked toxic, harmful to health, extremely flammable or harmful to the environment, a risk assessment must be performed based on the safety data sheets. An assessment must then be made to determine whether less harmful substances can be used instead (substitution assessments).

Sewage water

Contact with sewage water involves a certain risk of contamination from bacteria and viruses. This risk depends on the degree of contact with sewage water. The risk of contamination can be reduced by using the correct protective equipment, good personal hygiene and good preventive routines during daily work.

Our occupational health services can offer vaccinations to prevent infection.

SUBSTANCE ABUSE

You are not allowed to be under the influence of substances or engage in gambling while at work. This includes alcohol, drugs, hangovers, the smell of alcohol, and (illicit use of) medications that can lead to impairment.

All employees are responsible for contributing to a drug- and gambling-free work environment at NRC. If you witness a colleague coming to work intoxicated or struggling with a gambling addiction, you are obligated to report it. Contact your supervisor immediately and provide details of what you have observed. In situations that pose a danger to people and workplace safety, the employee will be sent home. Furthermore, the supervisor will investigate and address the matter to provide assistance to the affected employee.

It is not supportive to turn a blind eye, trivialize, or actively conceal issues related to substance and gambling problems in the workplace. We should show care for each other - caring means showing concern.

At NRC, we have an AKAN committee that works to facilitate and assist in cases involving substance and gambling problems. It is possible to enter into an AKAN agreement if one has substance and gambling issues. The company's health service will assist and oversee the process to help the employee.

SEE THE TABLE OF CONTENTS

PSYCHOSOCIAL WORKING ENVIRONMENT

All of our employees, contract workers and subcontractor employees are entitled to a working environment characterised by respect for one another. No one should be exposed to harassment or other improper conduct. No one has the right to violate the integrity and dignity of others, and no one should be exposed to negative psychological stress. Our working environment must contribute to the prevention of injuries and illness, and should be characterised by well-being, job satisfaction and a sense of community.

As a rule, working environment problems should be discussed with an immediate supervisor, but you can also seek advice and guidance from your shop steward, safety representative or HR personnel. Our occupational health services maintain a neutral role in working environment cases and can also be contacted.

HARASSMENT

It is considered harassment when a person is subjected to unwanted negative conduct, exclusion or statements that are experienced as or that are intended to be offensive, frightening, hostile, degrading or humiliating.

This may include unwanted sexual attention, provoking, exclusion, or hurtful taunting, teasing or bullying. Bullying involves systematic negative behaviour and actions that are consistently aimed at one individual.

Harassment may involve single incidents or incidents that repeat over time.

The Norwegian Equality and Anti-Discrimination Act states that there must be special protection against sexual harassment and harassment based on gender, ethnicity, religion, life philosophy, disability, sexual orientation, gender identity and gender expression.

Harassment and improper conduct are usually experienced as violating and isolating, and it can lead to serious consequences for a person's health in the form of psychological or physical problems.

Use NRC's whistleblowing channel if you have been subjected to harassment in the workplace, or have observed harassment against others.

REPORTING OF UNACCEPTABLE CIRCUMSTANCES

NRC Group's whistleblowing channel enables everyone to report knowledge or suspicion of unacceptable circumstances without fear of reprisal. Unacceptable circumstances may include bullying, harassment, insider trading, money laundering, fraud, bribery, kickback schemes, or other violations of NRC Group's ethical guidelines or laws and regulations.

How to report:

You will first be encouraged to report such circumstances internally to your immediate supervisor or to a more senior line manager. You may also report internally to management through a shop steward, safety representative or a colleague. Your report may be verbal or presented in writing. If you are not comfortable with reporting to your immediate supervisor, or if this person does not follow up your report in an appropriate manner, you may use NRC's electronic whistleblowing channel at SharePoint.

The whistleblowing channel provide the opportunity for anonymous reports. However, any investigations and follow-up activities will be easier to carry out and are likely to be more successful if you identify yourself. The recipients of the information given through the whistleblowing channel is the whistleblowing committee of NRC Norway AS, led by the Legal Director of NRC Norway AS.

SICK LEAVE

Absence due to illness must be reported to the immediate supervisor and manager of the project by phone. Text messages and emails are not considered sufficient reports as long as you are able to speak. Absence must be reported before the beginning of your workday or work shift, and then daily until a sick leave certificate is presented.

More detailed routines for sick leave certificates and follow-up of sick employees can be found in the NRC Norway personnel manual.

REMEMBER: The first 16 days of sick leave (the employer period) will be paid by the employer.

Alternative or adapted work

To avoid or reduce the duration of sick leave, it is important to assess opportunities for offering alternative work if an employee cannot continue or return to ordinary work tasks. The immediate supervisor and employee will then come to an agreement on any necessary modifications in order for the employee to return to work. **Essential questions in this process include:**

- **What should the work hours be?**
- **What tasks can the injured or sick employee perform?**
- **How long should the measure last and how often should the injured/sick employee be followed up?**

Alternative tasks may be relevant if the employee cannot perform any of the tasks they usually do.
Examples of alternative work:

- **Courses – for instance, in Munio or other suppliers**
- **Read the content of the HSE folder – procedures/work instructions, etc.**
- **Assist in HSE work tasks for the project – conduct HSE rounds, check for order/tidiness, check to make sure that chemical products, safety data sheets, labelling and the content of CoBuilder are consistent, follow up RUIs in the project, measures for well-being, such as waffle making/grilling food for lunch, etc.**
- **Assist with other tasks in the project, for instance, related to internal control, logistics, purchases, etc.**

Agreements will be written down in a follow-up plan and sent to the employee's general practitioner and to the local NAV office.

HEALTH EXAMINATIONS

A health examination must prevent and reduce ailments and illnesses related to work and the workplace. In the case of certain types of work with particular health risks, the employer has a duty to ensure that the employees have health examinations carried out. For some other types of work, the employer is required to offer health examinations to the employees.

The occupational health service generally recommends health checks every 3 years. At NRC Norway, managers order health checks for their employees when there is a need for this.

A health check will always be adapted to the individual employee and the exposures they are exposed to. Elements that can be included in an occupational health check can be blood pressure measurement, hearing examination, lung function and blood tests that can reveal heavy metals. A conversation about what the employee is exposed to and work-related health problems. The occupational health service can also refer you on to specialist health personnel if necessary.

SAFETY REPRESENTATIVE

Safety representatives and the work they do in their safety areas are an important part of the HSE work, which has a long history in Norwegian labour. NRC Norway has a legal obligation to appoint a safety representative, and our employees have a duty to participate in HSE work.

When you are appointed safety representative for a project, this project is your safety area until you are permanently moved out of the project or until the project is finished. A safety representative is selected for a period of 2 years.

As a safety representative, your role will be defined through laws, regulations and established practice. This role is limited to the health, safety and environment provisions of the law. Safety representatives are the employees' representatives in working environment issues.

When you are appointed safety representative, you will be given training in HSE laws and internal company systems and routines. The NRC school arranges 40-hour courses for safety representatives.

If a safety representative needs further training, this can be arranged with the project manager or chief safety representative.

When you are a safety representative for a project, you will have an active role in HSE work. You will help to ensure that routines are followed and that employees have a safe workday.

Safety representatives participate in HSE rounds, safety service meetings, and project work for planning and implementing HSE measures.

When the Norwegian Labour Inspection Authority conducts inspections of the project, the safety representative should be present.

WORKING ENVIRONMENT COMMITTEE (AMU)

NRC's Working Environment Committee consists of 3 appointed representatives from the employer and three representatives among the employees. In addition, the Director of Human Resources, HSE and Quality Assurance Director, and a representative from Occupational Health Services are regular participants without voting rights.

This committee is involved in the planning of safety and environmental measures at the company. Their task is to follow the development of the working environment and help ensure a sound working environment at NRC.

Working Environment Committee tasks

1. Handle matters regarding occupational health services and safety services.
2. Handle matters regarding training and instruction in areas that may be of importance for the working environment.
3. Discuss plans for new premises, processes or remodelling that require approval by the Norwegian Labour Inspection Authority.
4. Discuss other plans that may be of significance for the working environment, such as new machines, rationalisation measures, changes in work processes and preventive safety measures.
5. Participate actively in the business' health, safety and environment efforts. Participate in assessments, the preparation of action plans, and give advice on prioritisations and measures.
6. Assess health and welfare aspects of working hour schemes.
7. Review all reports of accidents, near accidents and illnesses that may be due to the working environment. Focus on the cause of the incident and ensure that the employer takes the necessary steps to prevent it from happening again.
8. Review all reports on occupational hygiene assessments and results.

SUSTAINABILITY

We will strive to work continuously to minimise our impact on the environment, in accordance with applicable laws, regulations and standards, as well as the requirements set by our clients and by ourselves for protecting the external environment.

We will continuously work to reduce our impact on the environment, for instance, by reducing our energy consumption and emissions, focus on waste reduction, waste sorting and reuse, and ensure that our product and service supplier takes its responsibility for the environment and its social responsibility seriously.

Accountability and Corporate responsibility

NRC is ISO-certified for the NS-ISO standard 37001:2016; anti-bribery management system. We have also signed Fair Play Construction ethics initiative. By doing so, the NRC Group has committed itself not only to comply with the laws, but also to be an active driving force for ensuring a fair industry.

As a group, we are working each day to counteract corruption and bribery. We maintain focus on fair competition and integrity in the supply chain and value chain. Routines and systems for reporting have been established in compliance with the Norwegian Working Environment Act. Guidelines for business ethics, as well as general ethical guidelines serve as the NRC Group's primary policies for ethical business practices.

Diversity

The construction industry is known as a male-dominated industry. We would like to help change this, and we are therefore actively working to ensure diversity and inclusion.

The NRC Group recognises the issues of diversity and inclusion, and therefore offers equal opportunities regardless of gender, age, sexual orientation, ethnicity, religion, political opinions or social
background. Diversity and inclusion create value. An inclusive workforce leads to a diversity of thought, which is a key driving force for innovation and growth. To improve diversity at NRC, we have placed greater focus on our recruitment and training programmes.

To promote attitude change in an industry with a gender imbalance, it is essential for the industry to work together. NRC Group Norway is a proud member of Diversitas, an industry network with the primarily goal of achieving gender equality in the construction industry.

UN global compact

The UN Global Compact is the United Nation's organisation for sustainable companies, and the world's largest strategic initiative for sustainability. The NRC Group has now become a member of the UN Global Compact
in Norway, and has committed itself to following the Ten Principles of the UN Global Compact, and to working together to achieve the United Nation's sustainability goals.

The Ten Principles of the UN Global Compact provides a framework to help companies ensure responsible business practices with respect to human rights, labour, anti-corruption and the environment. Along with the UN's Sustainability Goals, these principles function as a guide for their members' efforts to achieve sustainability. Through its membership, NRC Group has committed itself to following up and reporting its own work in accordance with the Ten Principles of the UN Global Compact.

EXTERNAL ENVIRONMENT

Our environmental policy should form the basis for all our work. All of our employees, contract workers and subcontractors must show an understanding and acceptance of our goal to reduce our environmental footprint. We will continuously work to minimize our environmental impact in the work we perform.

Waste reduction, waste sorting and reuse

Projects should be planned in such a way that they generate the minimum amount of waste. Waste that is generated must, to the greatest extent possible, be sorted and recycled. Sorted materials must be placed in marked containers. Remember that waste sorting leads to lower costs and a tidier, safer and more efficient workplace.

Hazardous waste must not be mixed with other types of waste. This must be placed in special containers. Any required electronic declarations must be completed (avfallsdeklarering.no) and registered to the correct organisation number.

We must always assess whether materials, equipment or debris can be reused. Ensure that materials are utilised in the best possible way.

Emissions - unwanted incidents

Unintended emissions to air, water and soil must be prevented.

1. **Fill fuel at established sites, or from tanker vehicles.**
2. **Place tanks and containers such that they are not exposed to collisions or other damage that might lead to emissions.**
3. **Perform repairs and maintenance work on machinery in a designated area with a sealed underlying surface and an oil separator filter.**
4. **Carry out cleaning procedures at an approved cleaning site.**
5. **Limit run-off and erosion to watercourses.**

All machinery must carry absorbents in the event of an unwanted incident involving oil or fuel. Used absorbents must be handled as hazardous waste.

Energy consumption and greenhouse gas emissions

Most energy consumption and greenhouse gas emissions related to the use of machinery and transport. The use of environmentally friendly and non-fossil fuel alternatives must therefore always be considered.

Examples of solutions:

- **Logistics/driving techniques**
  - Choosing local suppliers of materials
  - Choosing landfills
- **Avoid engine idling**
- **Non-fossil fuel or electric machines Energy**
- **Efficient work barracks**
- **Energy efficient heating of the construction site**
- **Choosing environmentally friendly products**
  (e.g. low-carbon concrete, low-temperature asphalt, recycled steel, etc.)
- **Containers with electric power**
- **Solar power solutions**

Noise to the surroundings

Noise emissions must be limited with the use of modern methods and machinery. Work must be planned such that noise-generating activities can, to the extent possible, be carried out during daytime hours. Noise regulation T-1142 imposes restrictions on levels of noise, including impulse noise. In the periods when we have been granted an exemption for evening and night work, there should still be a 'quiet period' in residential areas between 23:00-01:00. During this period all noise-generating construction and site work must cease.

If it is necessary to perform work that will generate a noise level exceeding the limits in the noise regulations, it is necessary to apply for special permission and all affected neighbours must be informed. Normally, an application must be submitted for all impulse noise and extreme noise-generating work in built-up areas and for work carried out at night in residential areas. A notification will be sent to the developer, chief municipal physician, the police and neighbours.

Dust to the surroundings

NRC Norge AS is committed to reducing the environmental impact in the form of dust emissions on the surrounding areas. Buildings and other vulnerable areas near the construction sites should not be unduly affected by dust fallout from the contractor's operations. The work shall be carried out in accordance with the requirements specified in T-1520 Chapter 6.

Construction activities and construction traffic should not result in harmful emissions of dust and nitrogen oxides. We shall strive to minimize the emissions of greenhouse gases, particulate matter, and dust dispersion.

Materials and choice of products

Less harmful alternatives to products that pose risks to health and the environment harmful to health should always be considered, if this can be done without incurring unreasonable costs or disadvantages (substitution assessments). Risk and substitution assessments are done through CoBuilder Collaborate, which guides the user through an assessment process.

Red List species and cultural heritage sites

If there are suspected findings of cultural relics, red-listed protected plants, organisms or animals, the work must immediately cease, and the client/ authority must be notified.

Before starting the work, check the websites miljøstatus.no and artsdatabanken.no for information on what might be found in soil and the surrounding environment.

Mass management/transport

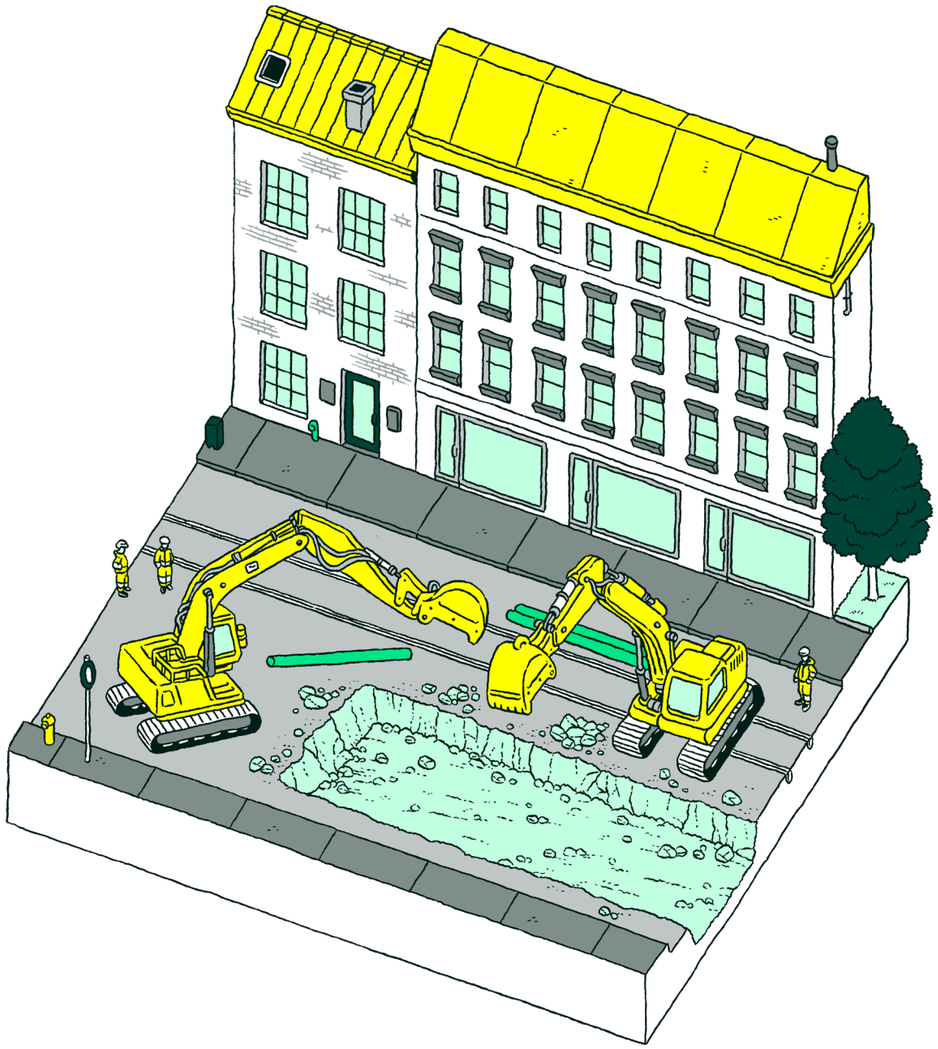
Mass management in projects have a heavy impact on the external environment. Polluted ground must be managed in accordance with the project's action plan. Samples of the masses must be taken if the masses are to be relocated to the area. Samples must be taken in accordance with TA-2553. We must strive to reuse mass materials internally in a project, as this would have a significant effect on greenhouse gas emissions. This will naturally also have a positive financial effect.

If the masses are to be removed from the site, this should be treated as waste, in accordance with Chapter 9 of the Waste Regulations.

Water management

Construction and surface water must always be managed in compliance with the developer's requirements or requirements stated in the emission permit. Such situations generally arise in cases of drilling, sheet piling, work at sea, etc., but can also occur when construction pits are filled with precipitation.

An application must be submitted to the municipality if water is to be released into municipal surface water/sewage network, or to nearby areas.



EMERGENCY PREPAREDNESS

Local emergency preparedness, notification and action plans have been prepared for all NRC projects and workplaces. These describe how unwanted incidents or accidents should be managed.

Everyone who works at the site will be informed of the plans, which will be posted in an easy to spot location. Make sure you have sufficient knowledge of these plans, so that you know what to do if an unwanted incident or accident occurs at your workplace.

LEARN ABOUT THE EMERGENCY PREPAREDNESS PLAN

Reporting

If you or one of your colleagues is injured at work, the immediate supervisor must be notified as soon as possible. Make sure that you are well informed of the reporting plan that applies to your workplace.

Media management

All media questions must be directed to the communications manager of NRC Group Norway, without exception. No one is permitted to make statements on behalf of the company without prior agreement.

Debriefing and personnel follow-up

Checklist for serious accidents:

- **Gather everyone involved at a meeting place. Do not let anyone go directly home.**
- **Let everyone have the chance to contact family members.**
- **Give everyone the opportunity to talk about what has happened and identify any witnesses.**
- **Inform everyone of shock and stress reactions that may arise, and that everyone will have the opportunity to talk with occupational health services. Occupational health services will determine the need for further follow-up of each individual.**

As needed:
Organise a social contact network for family members available evenings and nights, and determine a time for the group to meet the next day, if relevant.

Alternative or adapted work

To avoid and/or reduce the duration of sick leave, it is important to assess opportunities for offering alternative work if an employee cannot continue or return to ordinary work tasks. Together with the injured person (and possibly the injured employee's doctor), we will agree on what can be done to help the injured employee return to work.

Alternative tasks may be relevant if the injured employee cannot perform some of the tasks they normally do.

FIRST AID

Accidents with personal injuries

- Secure the site of the injury, get an idea of the situation and limit the consequences. Make sure to protect your own safety.
- Call for help: Phone 113 for ambulance.
- Begin first aid.
- Notify management.
- Cordon off the site of the injury and keep unauthorised persons away.
- Meet the ambulance at the agreed location. If relevant, clear space for the helicopter to land.

In the event of fire or explosion

- **Call for help: Phone 110 for fire services.**
- **Begin extinguishing the fire, if possible.**
  - When there is a fire in electrical sources, use powder as the extinguishing agent.
  - In the event of explosion: Evacuate immediately
- **Assess the risk of spreading. Try to limit the fire.**
- **Notify management.**

In the event of emissions

- **Stop ongoing emissions and limit the spread of emissions.**
- **Use absorbents or similar methods. Avoid the use of water!**
- **Notify management.**
- **Excavate the contaminated mass and place it in containers for hazardous waste.**
- **Notify fire services at 110 for major emissions or for situations that are out of control.**

LIFE-SAVING FIRST AID

It will always take some time from the moment an injury occurs until the injured person can be treated by qualified personnel. During this period, it is essential that the injured party is given assistance. Good first aid can:

1. **Save lives**
2. **Limit the extent of the injury**
3. **Relieve pain**

EXAMINE THE INJURED PERSON

Try to make contact

- **Try to wake the person by gently shaking their shoulders and calling: “Are you awake?”**
- **If the person wakes up, look for injuries.**
- **If the person does not react, he or she is unconscious. Check their breathing.**

Check breathing

- **Free the airway: Remove any visible foreign matter (vomit, blood): Lift the lower jaw forward with two fingers under the chin. If there is NO suspicion of neck injury, the head can gently be moved backwards by placing one hand on the forehead.**
- **Hold your cheek/ear close to the mouth and nose of the person, and listen for breathing for 10 seconds.**
- **Check to see if the chest is rising and falling.**

Examine

- Check the skin. If blood circulation is failing, the skin will be cold, clammy, pale and in a cold sweat.
- Check for external injuries, e.g. bleeding or signs of fractures. It may often be necessary to remove clothing to get a better idea of the injuries.
- Perform this examination as gently as possible.

PERSONS WHO ARE **NOT** BREATHING

- **Begin cardiopulmonary resuscitation (CPR).**

PERSONS WHO ARE BREATHING

- **Check for symptoms of circulatory failure.**

Symptoms of circulatory failure

- Pale, cold and clammy skin.
- Chills/shivering.
- Behaving strangely or confused.
- Do you see blood or signs of internal bleeding?
- Is the person in any pain?

Measures against circulatory failure

- **Keep the person warm.**
- **Place a conscious person flat on their back with their legs raised.**
  – A conscious person with chest injuries and troubling breathing should sit in a semi-raised position to make it easier for them to breathe.
- **Stop any bleeding.**
- **DO NOT give them anything to drink!**

Cardiopulmonary resuscitation (CPR)

Remember to phone 113 if this is not already done! Start with 30 chest compressions:

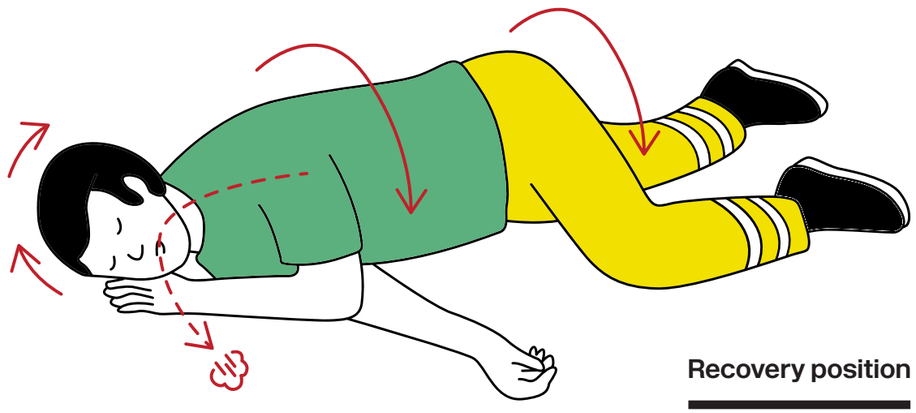
- **Position the person on their back on a firm surface.**
- **Find the pressure point, which is between the nipples on the breastbone.**
- **Keep your shoulders directly above the pressure point.**
- **Press down 5 to 6 cm, keeping your arms straight, then release.**
- **Compressions should have a rate of 100 per minute.**

CONTINUE WITH 2 RESCUE BREATHS:

- **Open the airway by gently lifting the chin up and forward while bending the head gently backward. Look for any foreign objects in the mouth and remove them.**
- **Pinch the person's nose and seal your mouth over the person's mouth.**
- **Blow steadily and firmly into the mouth until you see the chest rise. Blow at a rate of about 1 second per breath.**
- **Allow the air to come out.**
- **Blow into the person's mouth again.**
- **Continue with alternating 30 chest compressions and 2 rescue breaths until help arrives.**

Unconscious persons who are still breathing

- To ensure a free airway, the person should be placed in the recovery position.
- Pull the uppermost leg up and forward to stabilise the person.
- Bend the person's head back and place the face with their mouth low toward the ground. Use your hand as support under their chin.
- Remove blood and vomit from the mouth.
- Check regularly to make sure the person is still breathing.
- Keep the person warm: If outdoors, the person can be placed on a blanket. Spread clothing or a blanket over the person if available.



Recovery position

External bleeding

- Apply pressure to the bleeding wound with a sterile compress or similar item.
- If the wound is on the arm or leg, raise the limb above the heart.
- Place something cold (snow/ice/cold water/cold cloth) on the bleeding wound.

Foreign object in the airway

A foreign object in the airway may obstruct breathing and the person will choke.

This is what you can do:

1. Try to get the person to cough.
2. Apply five hard blows between the person's shoulder blades.
3. Give them five abdominal thrusts (Heimlich manoeuvre).
4. Continue by alternating between five blows to the back and five abdominal thrusts until the foreign object is dislodged.
5. If the person faints, is not breathing and has no pulse, begin CPR immediately.

HEIMLICH MANOEUVRE:

1. Stand behind the person.
2. Make a fist with one hand and place it between the person's navel and breastbone.
3. Grasp your fist with the other hand.
4. Press your fists hard into the abdomen with quick, upward thrusts.
5. Release and repeat.

Determine how hard you should thrust based on the person's size.

Burn injuries

1. Quickly cool the burn with cold water for the first couple of minutes.
2. Cover the injured skin with sterile bandages or a clean cloth.
3. Then cool with lukewarm water (about 20°C) for AT LEAST 20 minutes.
4. Do not tear textiles from the wound if they have burned into the skin.
5. If available, apply a burn dressing (Water-Jel or similar) when you are finished applying lukewarm water, or if water is not available.

Phone 113 as needed to request transport to a treatment facility

Electrical injuries

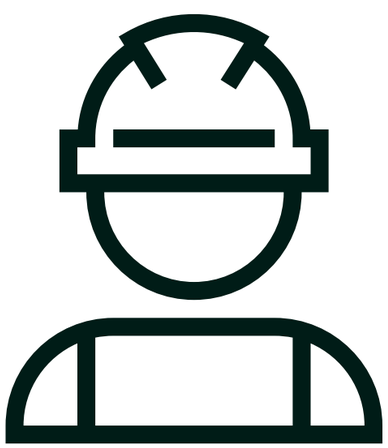
Ensure your own safety so that you are not exposed to electricity. Treat the symptoms of electric shock as any other first aid emergency (burn injuries, loss of consciousness, cessation of breathing, fall injuries, etc.)

Anyone who has been exposed to the following must be taken to hospital for care:

- **High-voltage current**
- **Lightning strike**
- **Low-voltage electrical shock where the current has probably gone through the body**
- **Loss of consciousness or disorientation after an electric shock**
- **Burn injuries**
- **Signs of nerve damage (e.g. paralysis)**

Download the app STRØMULYKKE (electrical accident)
– this will tell you what to do in the event of electric shock.

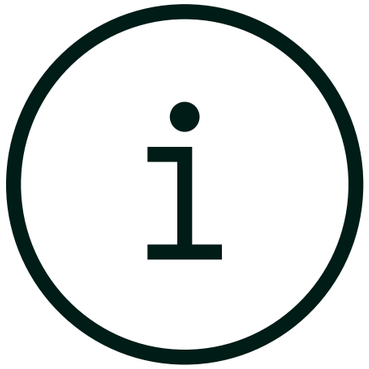
SEE THE TABLE OF CONTENTS



Psychological first aid

- **Stay with the person who is injured**
- **Take care of anxious persons**
- **Explain what has happened and say that help is on the way**
- **Be a good listener and accept emotions**
- **Keep curious people away**

Don’t give up!
Continue provide first aid until healthcare personnel arrive and assume responsibility.



COMMONLY ASKED QUESTIONS ABOUT PERSONAL PROTECTIVE EQUIPMENT

Who should use standard protective equipment?

A Employees with Gunnar Knutsen AS

B Anyone who spends time at NRC Norway's railway and construction sites are required to wear standard personal protective equipment for railway and construction projects. This also applies to subcontractors, suppliers and visitors.

Can I wear shorts or calf-length trousers?

If the work you will be performing does not involve a risk of injury to your legs, e.g. cuts or burns, you may wear shorts. Some developers we work for require employees to wear trousers. You must therefore check to make sure that shorts are permitted at the place where you will be working. NRC recommends trousers for everyone who works at our sites.

When should I replace my helmet?

For daily, outdoor use in direct sunlight or other extreme environments/tough use, your safety helmet should be replaced after 2 years (from the date you started using it). If, for instance, you work in an office and only wear a helmet sporadically, your protective helmet may last up to 5 years before it must be replaced. Some helmets have a label with a date on the inside. Check to see if your helmet has this. Follow the date indicated in your helmet. Note the date on the label in your helmet when you begin using it, and it will be easier to remember when to replace it. A helmet should also be replaced if it is subjected to a hard hit. Even if there are no visible signs of damage, it may still be more fragile. The only stickers you should put on your helmet are those approved for use on helmets.

How long does high-visibility clothing and other workwear last and when should I replace them?

Both high-visibility clothing and other workwear are affected by washing and regular wear and tear. Chemical spills on workwear can leave lasting traces and may not always disappear after regular wash. High-visibility clothing that is soiled is not visible, and it should be washed or replaced if it does not come clean in the wash. If your clothing is damaged, hand them in and get a new set from your employer. Regular high-visibility clothing and flame retardant or anti-static visibility clothing (multinorm) can be washed at home by the employee, but remember to follow the washing instruction on the clothing carefully. If the clothing is washed incorrectly, it may entirely, or partially reduce the effectiveness of the workwear's protective properties. Regular high-visibility clothing can tolerate about 40 wash cycles before losing its reflective properties. If chemicals have been spilled on your clothing, you should hand them to your employer, deliver it to a professional service for cleaning, or purchase new clothing.

Why can't I use low cut safety shoes?

Because twisted and sprained ankles are one of the most frequent accidents here at NRC. High cut safety boots provide more stability around the ankle joint and help prevent this type of injury.

Is a helmet-mounted visor considered sufficient as safety glasses?

Helmet-mounted visors (according to EN166 standards) are approved as safety glasses. Visors are easier to use incorrectly and do not fit as well or as closely as ordinary safety glasses. We therefore recommend using ordinary

protective glasses (EN166) when performing manual work. Helmet-mounted visors cannot replace close-fitting safety goggles.

Must I switch from safety glasses to close-fitting safety goggles if the work operation indicates this?
Yes, because many operations require the use of close-fitting safety goggles, such as work that involves cutting, grinding, drilling and spraying, as well as work with chemicals and fresh concrete. There are many types of eye protection, and it is therefore important to use eye protection that is suited to the work operation.

What do I do if certain weather conditions or other circumstances make it difficult to see properly through my safety glasses?
Safety glasses should then be removed until visibility improves and the use of safety glasses is sound and appropriate again. This does not apply to work operations that require close-fitting safety goggles. If weather conditions pose a risk, the work operation should be postponed.

Should my employer cover the cost of prescription safety glasses?
Yes, prescription safety glasses will be covered for employees who must wear glasses in their daily lives.

What type of protective gloves are required?
The type of glove should be suited to the type of work. When working with chemicals, it is necessary to use gloves that protect against the substance you are working with.

If there is a risk of cut injuries, you should use cut resistant gloves with a suitable cut level. When working on energised electrical equipment (live-line work), you must wear electrical protective gloves. The same applies to low-voltage systems that are energised. For hot work (welding, flame cutting, etc.), it is important to use gloves that are approved for this use. Protective gloves should have a minimum standard of EN 420, preferably EN 388 if mechanical risks are involved. We must risk assess work operations and the environment in which they are performed, which represent different types of risks and different EN standards, before choosing protective gloves.
EN standard protective gloves can be found under “Mitt sortiment” (“my assortment”) at Ahlsell:

- EN 420 – Protective gloves - standard requirements (minimum requirement)
- EN 388 – Mechanical risks
- EN 511 – Cold hazards

EN standards that may be necessary to acquire for a project and that can be found at Ahlsell, but not under “my assortment”

- EN 407 – Thermal risk
- EN 12477 – Welding
- EN ISO 374 – Dangerous chemicals

A protective glove may be approved in accordance with several standards, but the minimum is EN 420. A protective glove that will protect against cuts and heat/flames would be approved in accordance with EN 420, EN 388 and EN 407.

For general work that involves a certain risk of cuts, we recommend protective gloves according to EN 388 with a suitable cut resistant level (straight blades require a cut resistant level A-F, circular knife blades require level 1-5, where F and 5 have the highest resistance).

Protective clothing
This is clothing that should be used for specific work operations, such as the use and handling of:

- Motorised chainsaw
- Chemicals
- Welding and other hot work
- High and low voltage systems

When working with both high and low voltage systems, protective workwear that is flame retardant in accordance with EN 61482 should always be used. Workwear must also comply with the visibility standards of EN ISO-20471, class 3 (jacket) and class 2 (trousers).

For hot work, the minimum requirement is flame retardant workwear in accordance with EN ISO 11612. Workwear must also comply with the visibility standards of EN ISO-20471, class 3 (jacket) and class 2 (trousers).

When using a motorised chainsaw, trousers with protection against cutting from handheld saws should be used, EN 381-5. (NOTE: Remember to also use safety footwear EN 20345 + safety footwear with resistance to chain saw cutting EN ISO 17249).

When working with asbestos, you must use a protective suit (for short-term work) certified in accordance with type 5, EN ISO 13982-1 or type 6, EN 13034 (remember a respirator mask and gloves).

When handling dangerous or liquid chemicals, use a protective suit in accordance with type 3, EN 14605 or 4, EN 14605 (remember a respirator mask and gloves).

When should I use respiratory protective equipment?
Respiratory protective equipment should be used when there is a danger of breathing in hazardous dust, solvents or gases. When painting and using chemicals, check the safety data sheet before starting to see if the substance requires good ventilation or other measures. Respiratory protective equipment is not a good substitute for other protective measures and should not be a permanent solution to a working environment problem. The employer is responsible for choosing the correct respiratory protective equipment for the work operation, type of pollutant, and the exposure level. Training in the proper use of respiratory protective equipment is important to ensure that you are working safely.

What type of respiratory protective equipment exists and what should I choose?
We distinguish between closed circuit and open circuit respiratory protective equipment. A closed-circuit respirator is an apparatus where the exhaled breath is rebreathed. These are systems used by smoke divers and underwater diving. They are used when there is no oxygen available. Open circuit respiratory protective equipment is for situations when there is enough oxygen, and it is only necessary to filter the air. Here, there are also limitations on the types of gases we can protect ourselves against, as the gases must have good warning properties in the form of a smell or taste. There are a few rules we must follow when using open circuit respiratory protective equipment.

<u>Protection level:</u>
All masks have a defined protection level. This describes how much cleaner the air is on the inside than on the outside of the mask. Inward leakage occurs both through the filter and due to a poor face seal. It is always important to get the highest level of protection, as there are numerous gases and chemicals that we don’t know enough about in terms of long-term effects. The greatest risk of gases and chemicals are the long-term effects, which may come as late as 20 years after long-

term exposure throughout a working life. Always use particle filters. There are particles wherever we are working, and a particle filter will help to extend the longevity of the gas filters as well.

Types of filters:
P1 is no longer common on the market, as it does not provide sufficient protection.
P2 filters 96% of all particles
P3 filters 99.97% of all particles
At NRC, you must always use a P3 filter.

Below is an overview of the different Gas filters and what they protect against. To find out what type of filter you need, you must check the HSE data sheet for the different products under point 8 to see what kind of safety measures are required.

- **A** Organised gases and steam with a boiling point of more than 65°C (paint, lacquer and solvents)
- **B** Unorganised gases and steam including chorine, hydrogen sulphide and hydrogen cyanide
- **E** Acid gases and steam including sulphur dioxide and hydrogen chloride
- **K** Ammonia and organic ammonia derivatives
- **AX** Organic gases and steam with a boiling point of less than 65°C
- **Hg** Mercury, is delivered in combination with particle filters (max duration of use, 50 hours)
- **NO** Nitrogen oxide
- **CO** Carbon monoxide

The type of mask needed by the user often depends on how long the job will take and how physically demanding the job is. Dust masks are intended for short-term jobs. They lose much of their protection and comfort when they become damp. A partial face dust mask with replaceable filters will seal better, and the air will always go out through the exhalation valves and not through the filter. If eye protection is needed, a full-face mask is a good alternative. A full mask also seals better around the face.

If the work will be physically challenging, the use of a fan motor, which blows air into the head unit/mask is recommended. The user would then not have to expend energy on breathing air through the filter, which requires quite a bit of energy. If the HSE data sheet states that fresh air is required, this means air from a compressor or oxygen tank.
The sealing ability of a mask depends on how closely the mask comes to the skin. All facial hair reduces the seal of the mask, and a full beard reduces the seal by about 80%. Therefore, the user is expected to shave in order to achieve the protection described. Persons with beards should use fan-based respiratory protective equipment.
It is recommended that workers wear portable gas meters to ensure that the area where the work will be performed is safe. The most common areas where gas meters may be necessary are sewers and tunnels. Gas meters are purchased for the specific work, so they cannot be used in other environments where the gas risk may be very different.

Respiratory protective equipment should always be stored in airtight containers so that the gas filters are not saturated by polluting gases in the environment when the masks are not in use.

Is a face mask considered respiratory protective equipment?
Face masks are not respiratory protective equipment; however they do protect against droplet transmission.

What causes hearing loss and what should I consider when choosing hearing protection?
There are two types of noise that can induce hearing loss: Impulse noise and long-term exposure. In both cases, damage is done to the eardrums' cochlear hair cells that vibrate from incoming sound waves. When enough hair cells are damaged, this will lead to hearing loss. The consequences of not using hearing protection is hearing loss and tinnitus (ringing in the ears). This can dramatically reduce a worker's quality of life. Efforts should be made to create good and essential routines to prevent such consequences.

The threshold value is set at 80dB. At this level, you can move around freely in an environment as long as you like, however, hearing protection must be available. From 85dB, there is a maximum time limit for exposure

in the noise zone. For every 3dB, the noise exposure level is doubled, and the time limit for exposure in the noise zone is halved. Hearing protection in the form of earmuffs (and ear plugs) are used to help mitigate this problem.

Generally, hearing protection should be used if you cannot hear a normal conversation when standing 1 metre away.

dB	Max. time
85	8 hours
88	4 hours
91	2 hours
94	1 hour
.....	.....
109	1 minute

A comfortable noise level is between 60 and 75dB. To achieve this decibel level, we must choose hearing protection based on how much noise reduction we need. Hearing protection with too much noise reduction may also be harmful, since this makes it difficult to communicate, and a worker may therefore take them off in areas with harmful noise levels.

To ensure the best possible combination of protection and communication, we recommend the use of earmuffs with active listening. This lets the user listen to everything going on around them. They can receive and send messages, but the earmuffs will automatically reduce the level of noise to about 80dB inside the earmuffs.

When working or spending time in areas with 95dB or higher, double hearing protection be necessary (earmuffs + ear plugs). Areas with noise levels higher than 110dB should be avoided entirely. Even brief exposure to noise levels above 105dB can cause hearing loss.

Can I use hearing protection with a radio at NRC?
No, radios and music inside hearing protection is inappropriate at a construction site. The sound from the radio or music may prevent you from hearing tools in operation, shouts from colleagues, approaching machines, or other things you must be aware of when at a construction site.

When should I use personal fall protection equipment?
Working at heights must always be done in a safe manner, with the appropriate work equipment and from a suitable surface. Collective fall protection should always be used if possible (railings, scaffoldings and similar devices). Personal fall equipment should be used for operations where collective protection is not possible. A safe job analysis (SJA) must be performed before personal fall equipment is utilised. All personnel using personal fall protection equipment must have received documented training in the use of a harness and life-saving procedures with a harness (Regulations concerning the Performance of Work).

Should I use fall protection equipment in a lift?
The product description or the lessor's description of each lift may specify whether the lift can be used with a safety harness in a basket. At NRC, safety harnesses are mandatory in all lifts, both scissor lifts and boom lifts, regardless of the requirements stated in the product description or the lessor's description.

NRC Group