ONYX POWER

HSE regulations
Power Plant Rotterdam

Provisions and general rules for the safe, healthy and environmentally conscious execution of work

****Unofficial English translation — for information purposes only.****

ONYX POWER

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1.1. Occupational Health and Safety policy statement

Health and Safety Policy Statement Power Plant Rotterdam

We want to ensure a safe and healthy working environment at Power Plant Rotterdam, where our people feel comfortable and occupational accidents and illnesses are prevented as much as possible.

We are aware that the industrial activities that take place at PPR involve a large number of occupational hazards. Examples include working at height and in confined spaces, as well as working on electrical installations and working with hot parts and hazardous substances. Therefore, we consider it of the utmost importance that we continuously work with all employees, but also with our contractors, to minimize the risks as much as possible.

Besides the fact that we work on this together every day, we also secure the structure to make this possible. To this end, for example, we have a clear health and safety policy and a health and safety care system.

For the above reasons, we will:

- put safety first in all our activities;
- comply with the laws and regulations on working conditions and translate them into our policy and into comprehensible and workable procedures and instructions;
- stimulate the safety awareness of our employees and contractors by actively involving them in the development and continuous improvement of our policy;
- take all necessary measures to prevent and control health and safety risks as much as possible;
- collaborate with all employees and other stakeholders on the needs and expectations of working conditions and well-being;
- protect our employees against (sexual) harassment, aggression and violence.

In doing so, we want:

- every employee to take responsibility for putting the health & safety policy into practice in the best possible way;
- the management team to support the health & safety policy, promote it and provide the means that employees need to be able to fulfill their responsibilities.

1.2. Environmantal Policy Statement

Environmental Policy Statement

Through our large-scale generation of electricity using now largely fossil sources, Power Plant Rotterdam is involved in important environmental challenges such as climate change, energy consumption and renewable energy. We do this with the least possible impact on the surroundings and the environment. Respect for people and the environment are therefore among our core values. We take this into account in all our decisions and the operation of our plant. In addition, we are constantly looking for improvement and communicate about this transparently.

Our clearly formulated environmental policy is embedded within the organization in our integrated management system. Our policy is not only based on our own vision, but we take into account the developments in the political social field as much as possible. We are therefore in regular contact with our main stakeholders. We continuously test and evaluate our policy and adjust it if necessary. For the translation into practice, we set objectives and use annual action plans that we monitor regularly and adjust if necessary.

For the above reasons, we will:

- secure and fully comply with the environmental laws and regulations in our processes;
- anticipate changes in laws and regulations and consult with our stakeholders as necessary to promote our interests;
- take measures to prevent and manage environmental risks as far as possible;
- conduct and maintain an open dialogue with our key stakeholders in order to take their needs and expectations into account as much as possible;
- promote cooperation with our customers and partners;
- promote environmental awareness among our employees by actively involving them in the development of our policies and procedures;
- giving our employees appropriate responsibilities and ownership of the results to be achieved;
- research, promote and apply energy-efficient and sustainable technologies and processes, provided they are economically justified;
- pursue continuous improvement in our environmental performance.

In doing so, our goal is that:

- every employee takes responsibility for putting the environmental policy into practice in the best possible way;
- the management team supports and promotes the environmental policy and provides employees with the resources they need to fulfill their responsibilities.

2. Introduction

This regulation contains the key rules established by Power Plant Rotterdam B.V. (hereinafter referred to as PPR) to ensure a safe and healthy working environment and to protect the environment. In addition, several other procedures and instructions also apply. These are available to employees on the quality intranet page. For contractors, they are defined in specific VGWM plans that are drawn up in advance of each major project or turnaround.

This regulation forms part of the contractual agreements and procurement terms between PPR and the companies and subcontractors carrying out work at PPR.

3. General provisions

3.1. General prohibitions

- Bringing, possessing and/or using weapons, ammunition and/or explosives;
- Using, possessing or being under the influence of alcohol or drugs;
- Photographing or filming without permission;
- Publishing or distributing records externally, including on social media, without management's permission – even if the recordings were initially made with permission.

3.2. General obligations

- Compliance with Dutch legislation on safety, health and environment;
- Compliance with local obligations, such as permits and decisions/acts.

3.3. Subcontracting

- Contractors intending to engage subcontractors at PPR, must inform the PPR contact person about the nature and scope of the intende work;
- Each contractor must maintain a list of subcontractors, employees and temporary workers performing the work and inform them about PPR's applicable rules.

3.4. Language proficiency

- Contractors and subcontractors must work with personnel who:
  - ✓ understand Dutch, English or German language or;
  - ✓ continuously work under supervision of a foreman who does;
- The contractor is responsible for ensuring that all risks, control measures and instructions are understood by their employees.

3.5. Working Hours

- The contractor and its subcontractors must comply with the Working Hours Act;
- The contractor must maintain a record of schedules and working hours and be able to provide it on request.

Access

- At least 24 hours (weekend days not included) prior to commencement, employees to be deployed must be registered with the contact person at PPR;
- Required documentation must be submitted with the registration;

- Upon arrival, individuals must report to reception and state their PPR contact person;
- A valid ID must be presented (passport or ID card);
- Everyone entering the site must be aware of the entry requirements;
- First-time or returning workers (after one year) must view the gate instruction. Office visitors see a short version; workers performing physical tasks or supervising work (including in the service building) must view the extended version and pass a test;
- Employees who come to work in the plant, including supervision, review the extended version that also requires passing a test.
- These employees must also have at least a valid VCA (SCC) certificate and show proof. Foreign employees must additionally have an A1 form and be able to present it on request;
- Non-EU residentials must present
- Use your access badge to enter or leave the site and wear. The access badge must be worn visibly at all times;
- Security is authorized to conduct a visitation and an inspection of materials and equipment;
- Throughout the site, except in marked pedestrian paths and offices, it is mandatory to wear prescribed personal protective equipment (PPE), see section 5.6.

3.6. Traffic and transport

- Access to the site with a vehicle must be requested through your PPR contact;
- Mobile workshops, service vehicles, material trucks, etc. must have an inventory list.
  Access will be granted by security via a parking permit;
- The Dutch Road Traffic Act applies on site;
- The permitted maximum speed is 15 km/h.
  Special transport (e.g. trucks with axially steered rear wheels) must be escorted during movement on-site;
- Parking is only permitted in designated or assigned spots;
- Pedestrians and cyclists always have right of way over motor vehicles.

3.7. Order, cleanliness and hygiene

- Ensure order and cleanliness in your workplace;
- Materials and tools will only be stored with permission of your contact person and in the designated area;
- Upon (temporary) termination of work, the workplace is left tidy;
- Walkways and platforms must be kept clear as much as possible;
- Escape routes and emergency exits must remain unobstructed at all times;
- Emergency provisions should be kept free and accessible at all times;
- Eating and drinking is not allowed at the workplace;
- The company restaurant or other areas where food and beverages are consumed shall not be entered with soiled clothing.

3.8. Waste

- Waste must be sorted and disposed of in the designated bins and containers;
- Waste must be disposed of in the appropriate containers as soon as possible, at the latest by the end of the working day;

- Hazardous waste must be delivered to the warehouse, with the exception of hazardous waste brought in by contractors. Contractors must arrange certified disposal themselves.

4. Emergencies (unsafe situations, (near) accidents and environmental incidents)

4.1. Response to emergencies

- Accidents or serious emergencies must be reported as soon as possible in Dutch, English or German by calling +31 (0)10 312 59 22;
- In case of an evacuation signal (slow whoop), immediately leave the work place and go to the designated assembly point. Use your access badge to sign out. Then follow the instructions of the emergency response team (BHV).
  Note: an exception is the test alarm that can be heard on every first Monday of the month immediately after the national alarm (approx. noon). No response is required to this test alarm;
- The use of elevators is strictly prohibited during an emergency.

Emergency response organization

- The site has an emergency response organization (BHV);
- The project manager may request contractors to provide BHV-trained personnel to support the on-site emergency team;
- For specific risks, contractors are responsible for arranging their own specialized emergency support.

4.2. Incident reporting and investigation

- Near misses or unsafe situation must be reported immediately to PPR's intervention responsible (IVV or project leader);
- All involved parties must cooperate in the incident investigation, if necessary.
- Contractors are often expected to conduct their own incident investigation.
- A preliminary report must be submitted to project management within 24 hours of the incident.
- Agreements about completing the investigation and implementing any corrective actions are made subsequently.

4.3. Environmental incident

- Environmental incidents or emergencies must also be reported immediately to minimize environmental impact. Examples include:
  - Unanticipated noise, odor and air emissions outside the facility;
  - Unauthorized discharges into surface water;
  - (Oil) leaks;
  - Storage of hazardous substances or waste without required containment;
- Report (oil) spills immediately to PPR's control room or intervention responsible;
- In case of potential spills of oil and/or other hazardous substances, containment trays must be placed;
- Spill kits are available for small spills;
- If necessary, involved parties cooperate with the incident investigation. Contractors are often expected to conduct their own incident investigation into root causes.
- A preliminary report must be delivered to project management within 24 hours of the incident. Follow-up agreements and corrective meausures are made subsequently.

5. General work requirements

5.1. Life Saving Rules

Both employees and (sub)contractors must adhere to the PPR Life Saving Rules and ensure that everyone involved is adequately informed of these essential rules. See 18 for our Life Saving Rules. Failure to comply with the Life Saving Rules falls under the Zero Tolerance Policy.

5.2. Mobile phone (cell phones) policy within PPR's technical installations

- During physical work or the operation of equipment, mobile phones or smartphones may not be used.
- If there is a need to make a call, it is done from a safe location and without performing other tasks simultaneously.
- The application of so-called GSM routers or signal boosters is not permitted.
- The application of a personal radio system requires permission from the project management and a written authorization from the Dutch Telecom Agency.

5.3. Work permits and Task Risk Analysis (TRA).

- All work is always directed by a PR-designated IVV (intervention responsible person), who also monitors compliance with rules and procedures;
- The contractor appoints a supervisor for their own team and aligns this with the IVV;
- Work may only be carried out with a valid work permit. The IVV is permit holder;
- In preparation for the work, hazards, risks and safety measures are defined and documented;
- PPR may require contractors to submit their own HSE plan and/or TRAs. Documentation must always be submitted to PPR for approval well in advance of the work;
- The IVV discusses the risks and control measures with the contractor before work starts via a start work meeting and, in the case of a TRA, also a toolbox meeting;
- If a toolbox meeting is held, all operational personnel involved must sign to confirm they understand the content.

5.4. Last Minute Risk Analysis (LMRA).

Prior to start any task, including after any work interruption, an on-site LMRA must be conducted. This shall include consideration of:

- Do I know exactly which part of the installation I will work on?
- Is the workplace safely accessible?
- Is the workplace tidy and adequately lit?
- When working at height: are colleagues' harnesses checked, are tools secured against falling, is there no work being done above/below simultaneously and has the scaffold tag been verified (if applicable)?
- Am I familiar with the content of the work permit and TRA (if applicable)?
- Are there any environmental risks?
- Have the installation components to be worked on been isolated and secured?
- Have the correct control measures been implemented (e.g., confined space clearance)?
- Are work equipment and PPE inspected and suitable for the task?
- Am I familiar with the escape routes and are the escape routes free of obstacles?
- Do I know what to do in case of an emergency or incident?

5.5. Work Equipment

- PPR machinery and installations may only be operated with permission from the IVV;
- Operators must be demonstrably trained or instructed to operate and use work equipment;
- Electrical work equipment must be de-energized after use and gas equipment must be depressurized.

5.6. Personal Protective Equipment (PPE)

PPE is mandatory throughout the site, with the exception of the office area, contractor village and some marked walking routes. The following PPE are mandatory for everyone:

	In all areas except (designated) walking routes: safety helmet, safety shoes, or boots, safety glasses and work clothing.
	In the power plant, work clothing must be flame-retardant in accordance with ISO EN11612 (minimum classification A1 or A2). This symbol must be visibly present on the work clothing.
	In ATEX zones, clothing must be antistatic in accordance with EN 1149-3. This symbol must also be visibly present on the work clothing.

Additional PPE required for specific areas or tasks (as indicated on the work permit) may include:

	Safety goggles: for grinding work or when there is a risk of splashing hazardous substances (must fully enclose the eyes)
	Face shield: for grinding work or when there is a risk of splashing hazardous substances.
	Hearing protection (ear muffs): for noise levels above 80 dB(A). Notice: some tasks may require double hearing protection.
	Gloves: when working with sharp objects and/or hazardous substances. Note: gloves must be appropriate for the specific task or substance.
	Respiratory protection: required in case of exposure to hazardous substances. Notice: filters must be suitable for the specific hazard.
	Fall protection (harness and laneyard): required for working at height where collective fall protection is not possible.

The contractor is responsible for supplying appropriate PPE to its employees.

6. Working at height

6.1. General

- The rules for working at height apply when there is a height difference of 2 meters or more, or when working at a height less than 2 meters, where a fall could cause serious injury (e.g. due to protruding objects or obstacles). They also apply when working within 4 meters of an unprotected depth, which meets one of the above criteria;
- Collective protective measures (such as guardrails or fixed barriers) must be used when working at height. If this is not possible or insufficient, personal protective equipment must be used. Coordination between the contractor and the IVV is required.

6.2. Fall Protection

To prevent falls during work at height, fall protection must be used. The following rules apply here:

- For work performed within 4 meters from a roof edge, collective fall protection is mandatory (guardrails, roof edge protection);
- For work performed more than 4 meters from a roof edge, collective fall protection is not required if safety zones can be used;
- If collective fall protection is not feasible, individual fall protection (harness with lifeline) must be used and included as a control measure in the TRA;
- Only approved harnesses and lifelines must be used;
- Wall and floor openings and skylights without fixed fall protection must be secured using solid barriers (e.g. scaffolding material).

6.3. Scaffolding

PPR adheres to the "Scaffolding Guidelines" of the Dutch industry associations VSB) and Bouwend Nederland. In addition, at a minimum, the safety measures described in the industry occupational Arbo catalogue and the scaffolding guideline website Home (richtlijnsteigers.nl) apply. Rules for scaffolding:

- Scaffolding material delivered to the site must be in good condition and comply with the rejection criteria of the "Scaffolding Guideline";
- Reuse of scaffolding material within a project, or in case of malfunctions (using internally stored materials) is only allowed if the execution scaffolding company has inspected and approved it in advance;
- Unsuitable/rejected material should be clearly marked as such and removed from our site as soon as possible;
- Scaffolds may only be erected, modified or dismantled by certified scaffolders and must be inspected by certified persons;
- Completed scaffolds are handed over to the scaffold supervisor after the "scaffold completion checklist" has been completed with positive results and signed by the client (or their representative);
- The scaffold supervisor must be officially appointed and trained for this task. The appointment letter is issued by the plant manager and shared with the training coordinator in copy. If the appointment is withdrawn, the coordinator is informed;
- After completion, a scaffold tag (scafftag) have to be placed on the scaffold by the scaffold supervisor. Scaffold completion checklists are kept until the scaffold is dismantled;
- Only scaffolds with a valid, signed scafftag with correct date may be used;
- Scaffolds may never be adjusted independently by a user. The IVV supervises this;

- Acces to and from scaffolds is ony allowed via stairs or ladders that are part of the scaffold;
- The use of swing gates at entrances to floors is mandatory;
- Work platforms are closed off using steel beams unless otherwise agreed with PPR;
- During transport, loading and unloading, measures must be in place to prevent materials from falling;
- Tools must always be secured against falling;
- Benches, ladders or other devices to gain extra height may not be used, nor may hoisting equipment be attached to scaffolding;
- Scaffolds with loose wedge connections may **not** be used;
- For working with electric equipment or cables on scaffolds, at least one of the following conditions must be met:
  - The equipment is double insulated;
  - The equipment is connected via an isolation transformer;
  - The equipment operates at 'safe' voltage;
  - The equipment is connected to a power supply with residual current protection (RCD) and the scaffold is adequately grounded.

The re-inspection period for scaffolding is two weeks, unless exceptional events (e.g. storms) require earlier inspection. After any modification or damage, the scaffold must be re-inspected and handed over again to the scaffold supervisor.

For complex scaffolds (e.g. suspended scaffolds or scaffolds higher than 24 meters) a construction drawing and calculation must be made in advance. Modifications to complex scaffolding - affecting the structure - are carried out after written permission from the structural engineer or on the basis of new calculations and drawings.

6.4. Rolling scaffolds

Rolling scaffolds (mobile scaffolds) do not need to be assembled by certified scaffolders, but must meet the following conditions:

- Aluminum rolling scaffolds with standard construction may be erected by persons familiar with the standard design. No specific training/certification is required for this;
- Before use, the IVV checks the rolling scaffold for integrity;
- Rolling scaffolds may only be used on a flat, stable surface and may never be moved while someone is on the scaffold;
- The maximum platform height of a rolling scaffold is 8 meters outdoors and 12 meters indoors;
- All individual components must be inspected;
- The rolling scaffold must be built and used according to the manual also provided.

6.5. Aerial Work Platform (AWP)

- Must be demonstrably inspected annually;
- May only be operated by personnel properly instructed for this purpose.

6.6. Ladders

Ladder are only used to bridge height differences. A ladder may only be used as a workplace only if no safer alternative is feasible and all of the following conditions are met:

- Standing height < 5 m;
- Effective standing time < 2 hours (total work time);

- Required reach < 1 arm's length;
- User maintain ≥ 1 hand on ladder + both feet on the rungs;
- Wind froce < 6 BF.

If one or more of these conditions are not met, a TRA must be drafted and submitted for approval to the safety expert. Under the given conditions, practically only short-term, light tasks, such as inspections, may be performed from a ladder. A ladder may never be left unattended.

6.7. Tools and equipment

- Materials and tools needed for working at height must be transported to the workplace using lifting equipment (e.g. a crane or construction hoist).
- Only light materials and hand tools may be transported with a designated belt or closed tool bag;
- When working at height, additional measures must be taken to prevent injuries to persons below or around the work area from falling material or tools.

7. Vertical transport

7.1. Hoisting work

Hoisting work involves risks such as crushing, pinching or material damage. To control these serious hazards, legally mandated measures apply:

- Only approved and certified lifting equipment may be used;
- All lifting equipment must have a certificate indicating, among other things, the 'working load limit'.
- Hoisting equipment may only be operated by persons with a valid hoisting certificate;
- Before using lifting equipment, all equipment must be inspected for technical condition;
- Overhead cranes may only be used by demonstrably trained operators;
- The area in which the load will be moved must be cordoned off;
- The operator is responsible for safety during lifting operation and must ensure adequate supervision;
- Two-way radios (walky talky) are mandatory if the operator cannot see the load being hoisted;
- Chain hoists may only be attached to designated lifting points approved for this purpose;
- Hoisting equipment must be equipped with all required safety devices (e.g. overload protection) and these may not be disabled;
- Lifting equipment must never be used to lift loads exceeding its "working load limit" indicated on the lifting equipment.

A lifting plan is required if one or more of the following conditions apply:

- The load exceeds 5,000 kg;
- The load has large dimensions;
- The load or lifting equipment may come into contact with active pipelines or process installations or the space is restricted for other reasons;
- If more than 2 persons are involved in communications (e.g. crane operator, IVV + 1);
- If more than one lifting device is used for the same load;
- The load adjustment requires precise positioning due to the plant components present;
- The crane operator cannot see the lifting load;

The lifting plan shall be reviewed by the contractor and PPR's IVV prior to work.
Work permits for lifting operations are issued only after all required lifting equipment has been inspected and the lifting plan (if applicable) has been approved.

7.2. Mobile cranes

The following documents must always be present with a mobile crane and will be checked by the IVV:

- Updated crane logbook;
- Results of initial testing or type examination;
- Certificates of periodic inspections of the crane and its accessories;
- Crane operator certificate.

7.3. Forklifts

- A forklift certificate is required to operate or drive a forklift;
- Only electric-powered forklifts are used indoors;
- In exceptional cases, LPG-powered forklifts may be allowed indoors after explicit permission from the PPR contact person.

- Diesel-powered forklifts are not permitted indoors;
- Forklifts owned by PPR may only be used by third parties with prior approval from the PPR contact person.

7.4. Use of work boxes

Work boxes may only be used if other means such as scaffolds or aerial work platforms cannot be used due to greater risks or excessive costs. Additionally:

- Communication between those in the work box and the crane operator must be clear and reliable;
- All persons in the work box must wear fall protection secured to the work box;
- The crane operator must not perform other tasks while operating the work box;
- The workbox may only be entered or exited while it is on solid ground.

7.5. Lifting cranes

Lifting cranes must be inspected, certified and tested annually according to EKH regulations (Dutch association for lifting equipment) by an EKH-certified inspection company. Before using a newly installed cranes, the entire setup must be checked to ensure the supporting structure is sufficiently strong.

Lifting beams (monorails)

The following testing and inspection regime applies for lifting beams:

- Establish the initial (zero) condition upon installation of a new beam or upon delivery of the supporting building structure (including structural calculation of lifting beam/building structure and corresponding testing to verify this calculation);
- Perform an initial inspection, certification and testing by an EKH-certified inspection company;
- Conduct an annual visual inspection by an (internal) expert with competence beyond user level;
- Re-testing is required only after any major repair or modification and must be performed by a qualified expert.

Before commissioning a lifting beam in combination with a trolley, hoist or other lifting devices, the complete assembly must be inspected and approved in writing by a qualified expert. This includes verification of the following:

- Is the lifting beam in good condition, especially regarding the presence and condition of end stops?
- Are the maximum load limits of the beam, trolley, hoist and associated lifting equipment properly aligned?
- Are the trolley, hoist and other lifting equipment to be used certified and approved?

After the assembly is taken out of use, the lifting beam must undergo an annual visual inspection, and all other associated equipment must be inspected or certified in accordance with the applicable equipment inspection procedures.

7.6. Lifting on structural or tripod elements

During daily maintenance or overhauls, lifting may sometimes be done from structural or tripod elements in the absence of fixed lifting beams. This is preferred over erecting temporary lifting scaffolds, due to reduced costs and safety risks. These structural elements are subject to the same inspection and inspection regime applies to the relevant structural or tripod parts as to lifting beams:

- Initial condition must be recorded (calculation of load-bearing structure and verification test);

- First inspection, certification and testing must be done by an EKH-certified inspection company;
- Before commissioning the structural or tripod element in combination with a trolley, hoist, etc., the assembly must be inspected and approved in writing by a qualified expert.

8. Confined spaces

A confined space is a largely enclosed area with limited accessibility. The potential risks, depending on the situation, include suffocation, fire or explosion hazards, tripping hazards, intoxication or poisoning and electrocution.

8.1. Risk assessment work in confined spaces

To determine the foreseeable risks and appropiate contral measures, a Task Risk Analysis (TRA) must be prepared in advance. When working with electric hand tools or cables in a confined space, at least one of the following conditions must be met.

- The equipment is double insulated.
- The equipment is connected via an isolation transformer.
- The equipment operates on "safe voltage" (≤ 50 V AC or ≤ 120 V DC).
- The equipment is connected to a power supply with a residual current device (RCD) and the confined space is adequately grounded.

8.2. Completion of confined space for work purposes

Operations is responsible for de-energizing and securing the confined space prior to commencement of the work. They will also perform a gas release measurement in accordance with the internal procedures and will check if the work permit includes all required control measures from the TRA before starting. The gas test results are recorded on the gas measurement log. A confined space may only be released for work if the atmosphere meets the following criteria:

- Oxygen content is between 19 and 23 % volume;
- Concentration of flammable/explosive gases <10% LEL (lower explosion limit), with a target value of 0% LEL;
- Concentration of other substances <20% of the occupational exposure limit, with a target value of 0%;
- If no values are shown on the measuring equipment, alarm tresholds apply;
- If operating conditions change, Operations must notify the manhole guard and IVV.

8.3. Entry conditions for confined space

Before entering a confined space released by Operations, the following minimum conditions must be met:

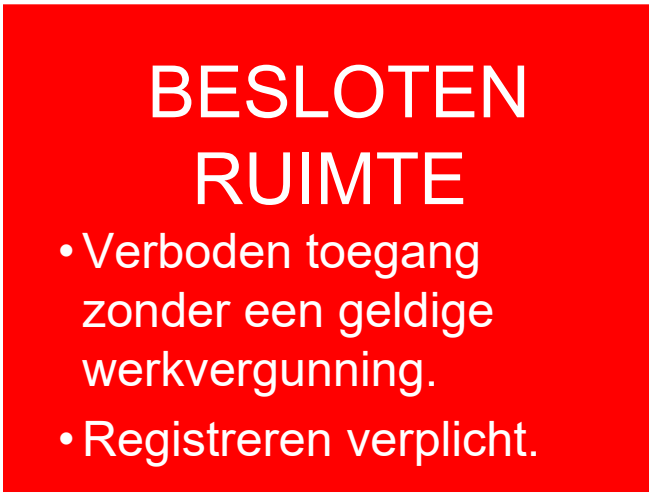
- A sign and registration board must be placed at the entrance. Other opened manholes (for the purpose of ventilation) may not be entered and must be marked with a "no entry" sign;
- The gas measurement log and work permit must be placed on or near the registration board, confirming that the confined space has officially been released by Operations;
- IVV must verify the presence and functioning of all required control measures prior to work;
- IVV must also discuss the tasks, risks and control measures with executive staff and manhole guard prior to work;
- A manhole guard must be present at an open manhole;
- For long or large-scale overhauls, CCTV (camera surveillance) may be used instead of a regular manhole guard (see separate procedure);
- Executive employees entering the confined space hang their photo badge on the registration board;

- In multi-day operations, the IVV must re-release the confined space each day after new gas measurements confirm that the atmosphere remains safe.

8.4. (Temporary) suspension of gas-free monitoring in a confined space

Once it has been ensured that acute health hazards such as suffocation, intoxication, poisoning or explosion are eliminated, the unrestricted measurement of a confined space can be (temporarily) stopped.
The TRA must specify which measures can be omitted and which new measures are required due to limited accessibility.

Signaling confined space



Confined space (red sign with white text)

No entry sign

9. Fire hazardous work

9.1. General

To work in a fire-safe manner, the starting point is always to eliminate or minimize the risk as much as possible. The preferred measure is to remove flammable substances and materials from the vicinity of the work area. This eliminates the need for further fire control measures. If this is not or not completely possible, the following measures apply.

Task Risk Analysis (TRA)

For fire hazardous work in a fire hazardous environment, the preparation of a Task Risk Analysis (TRA) is mandatory.

Work permit

At the beginning and end of each workday, and during prolonged interim breaks, there is a duty to sign in and out by the IVV to the LoTo office (dagdienst).

Inspections before and during work

The IVV inspects the area for the presence of flammable substances prior to work. He/she ensures that the required preventive measures have been taken and are observed. Half an hour after performing the fire-hazardous work, the area is checked again to ensure no residual risks of fire remain.

Ventilation

Fumes and substances produced by fire-hazardous work must be extracted as close to the source as possible, in combination with general ventilation of the space. If natural ventilation is insufficient, mechanical ventilation must be used. When ventilation is turned off or blocked in connection with specific work, the worker must carry a personal - calibrated! - gas detector.

Fire prevention measures and extinguishing equipment

When carrying out work, operational and suitable fire extinguishing equipment for the specific fire risk must be present in the immediate vicinity of the workplace.

Appropriate shielding or containment devices must be used when performing fire hazard work to prevent the spread of hot particles such as sparks, molten metal or spatter. This may involve the use of metal buckets, trays or welding blankets.

9.2. Gas cylinders

- No distinction is made between full or empty gas cylinders: both are subject to the same rules;
- Gas cylinders must preferably be stored outdoors or in a well-ventilated indoor area;
- Loose cylinders must always be properly secured against tipping.

10. Working in explosive atmospheres

This applies to all work in environments in which ignition sources may be present or may arise in a hazardous explosive atmospheres. Explosive atmospheres are classified into zones:

Zone classification	Explosive atmosphere present/disruptions in normal operations
Zone 0 (gas) Zone 20 (dust)	Always, temporarily or frequently present (> 10% operating time; >1,000 hours)
Zone 1 (gas) Zone 21 (dust)	Occasionally present (>0.1% operating time and <10% operating time, between 10 and 1,000 hours)
Zone 2 (gas) Zone 22 (dust)	Very rarely or only present for short period of time (<0.1% operating time; less than 10 hours)

PPR works in accordance with European legislation regarding explosion risks (ATEX Directive; ATEX = Atmosphère Explosible). The basic principle is to reduce any explosion risk to zero. Preventing ignition sources in explosive environments is mandatory. The preferred measure is to remove the source (deliver the installation and surroundings product-free). As a result, further explosion control measures are not applicable. If product-free delivery is not possible, the following measures apply.

- Areas with explosion hazards are indicated by the following pictogram:

- The preparation of a TRA is mandatory for work in explosive environments;
- Entering or working in areas with explosion hazard without permission is strictly prohibited;
- Work may only be carried out within the scope of the TRA;
- In case of insufficient ventilation, additional ventilation measures must be taken (if necessary with forced ventilation);
- Gas measurements for the possible presence of an explosive atmosphere (vol% LEL) are carried out prior to and, if necessary, during the work.
- If coal or wood dust may be present, a visual inspection must also be conducted prior to the work and preventive measures are determined;
- When working in an area at risk of explosion, ready-to-use and risk-adapted extinguishing facilities are available near the workplace;
- When the explosion hazard is temporarily absent, this is indicated by the signage below. The area may then be safely entered without additional measures.

Specific measures zone 0 and 20

Work in zones 0 and 20 shall be permitted only in highly exceptional cases and under the following strict conditions:

- Released dust must be removed using explosion-proof vacuum cleaners;
- The use of spark- or flame-producing tools is strictly prohibited;
- Explosion-proof equipment suitable for the zone class is mandatory;
- Antistatic equipment and materials are mandatory;
- Carrying and using mobile phones, radios (walkie-talkies) and hearing devices is **prohibited**;
- In zone 20, pneumatic tools are prohibited if the risk of dust clouds is present.

Specific measures zone 1 of 21

Work in zone 1 or 21 will be permitted under the following conditions:

Zone 1

- Gas measurements confirm there is no explosion hazard present;
- During operations, the area is continuously monitored with a stationary, continuously operating meter with alarm;
- The persons who perform the work, must wear personal gas monitors with alarm function;
- During the work, EX-certified communication devices must be used and must be in constant connection with the guard;
- The carrying/use of mobile phones, non-Ex radios (walkie-talkies) and hearing devices is prohibited.

Zone 21

- Use of spark- ore flame-producing tools or fire hazardous work is prohibited;
- Use of explosion-proof tools, suitable for the zone class, is mandatory;
- Inspection must confirm that no explosion hazard is present;
- The use of pneumatic tools is prohibited if the risk of dust clouds is present;
- Released dust must be removed using explosion-proof vacuum cleaners;
- During operations, communication devices must be provided and must be in constant connection with the guard;
- A fire watch must be present to supervise operations and to take corrective actions if necessary;
- The carrying and use of mobile phones, radios (walkie-talkies) and hearing devices is permitted.

Specific measures zone 2 of 22

Work in zone 2 or 22 will be permitted under the following conditions:

Zone 2

- Gas measurements confirm that no explosion hazard is present;
- During operations, the environment is monitored according to the measurement plan;
- During operations, communication devices must be used and must be in constant connection with the guard;
- The carrying and use of mobile phones, radios (walkie-talkies) and hearing devices is permitted.

Zone 22

- Use of spark- and flame-producing tools or fire-hazardous work is prohibited;
- Use of explosion-proof tools, suitable for the zone class, is mandatory;
- Inspection must confirm that no explosion hazard is present;
- The use of pneumatic tools is prohibited if the risk of dust clouds is present;
- Released dust must be removed using explosion-proof vacuum cleaners;
- During operations, communication devices must be provided and must be in constant connection with the guard;
- A fire watch must be present to supervise operations and to take corrective actions if necessary;
- The carrying and use of mobile phones, radios (walkie-talkies) and hearing devices is permitted.

11. Working under heat stress

This chapter describes the measures to be taken when working under conditions of excessive heat. Heat is considered excessive when the maximum temperature from the table below is exceeded.

WBGT-index			Afwisseling in het werk	
Licht werk ± 150 kcal/uur	Halfzwaar werk ± 250 kcal/uur	Zwaar werk ± 350 kcal/uur	Werkduur	Rusttijd
30,1 °C	26,8 °C	25,1 °C	110 min.	10 min.
30,4 °C	27,5 °C	25,5 °C	100 min.	20 min.
30,6 °C	28,0 °C	25,9 °C	45 min.	15 min.
30,9 °C	28,5 °C	26,6 °C	40 min.	20 min.
31,2 °C	29,0 °C	27,3 °C	35 min.	25 min.
31,5 °C	29,5 °C	28,0 °C	30 min.	30 min.
31,8 °C	29,8 °C	28,7 °C	25 min.	35 min.
32,1 °C	31,1 °C	29,4 °C	20 min.	40 min.
32,4 °C	31,4 °C	30,1 °C	15 min.	45 min.
32,7 °C	31,7 °C	30,8 °C	10 min.	50 min.
33,0 °C	32,0 °C	31,5 °C	5 min.	55 min.

The standards are calculated based on the WBGT index. WBGT stands for "Wet Bulb Globe Temperature", which expresses the perceived heat load. A wet bulb thermometer is used to determine 4 parameters. In addition to temperature, radiation, air velocity and humidity are measured.

The WBGT index, also called the effective temperature, is expressed in degrees Celsius, but should not be confused with ordinary air temperature. WBGT values are typically lower than the actual air temperature.

The maximum WBGT values do not indicate a comfort threshold, but rather the point above which serious or potentially life-threatening health effects may occur. An employee may already experience discomfort even if the maximum values are not exceeded. WBGT values do not take individual differences into account. The instructions described in this chapter only apply to generally healthy employees, who are physically fit for the task and wearing standard work clothing.

Prevention measures (work hygiene strategy)

Protect from sunlight
At first, employees must protect themselves from direct solar radiation.

Provide beverages
Provide water or unsweetened, non-carbonated beverages, preferably at a temperature between 10 and 15 °C. The beverage should contain sufficient mineral salts. Tap or bottled water is generally sufficient, but cold tea, lemon tea or diluted fruit juice are good alternatives. Avoid milk and pure fruit juice. Inform workers that they drink regularly - every 20 minutes - but in small amounts (max. 150 ml).

Install artificial ventilation
For prolonged work with heat stress, it is advisable to install mechanical ventilation.

Determine work and rest times.
If heat stress exposure persists after implementing the above measures, a system of working with mandatory rest periods must be introduced.

Preparing and executing the work

- Report temperature exceedance to the IVV and repeat measurements if necessary;
- If hot weather is forecast, additional measures must be taken in time. Organize work in consideration of weather conditions, for example, by adjusting the scheduling of heavy work during cooler hours.
- Educate about the symptoms of heat stress such as increased heart rate, dizziness, intestinal cramps and excessive sweating. In such cases, employees must stop working and seek a cool place;
- Avoid heat radiation by shielding heat sources and hot surfaces;
- Ensure natural ventilation by opening doors and shutters but avoid drafts. Ventilating during evening and night hours gives the best results.

12. Working in or near electromagnetic fields

- The basic principle is that (planned) maintenance work should preferably be carried out while the installation is switched off (no electromagnetic fields are being generated);
- Electromagnetic field strength measurements have been conducted at all installation components where electromagnetic fields are involved. These have been assessed against applicable standards and documented in a report (2022);
- The main results have been incorporated into the section in the Risk Inevntory & Evaluation (RI&E) on electromagnetic fields;
- Where necessary, safe distances are marked using this sign:

- Several areas have been identified where the magnetic field strength exceeds the sensitivity treshold for pacemakers or ICDs (100 µT). These areas are inaccessible to individuals with pacemakers or ICDs. For example, the room where the machine transformer is located, the generator room and the room where the BBT 10 is set up. These spaces are marked as follows:

- A TRA must always be prepared when work must be carried out while the installation is energized and within a marked EM zone. The following requirements apply:
  - Preferably, tools must be used that allow the work to be performed without entering the area;
  - If entry is necessary, the time spent in the area must be minimized;
  - Always work with at least two people, including one designated work supervisor (WV);
  - The number of people entering the zone must be limited to the absolute minimum;
  - The TRA must be submitted to the Installation Responsible Person (Installatieverantwoordelijke) for review;
  - The approved TRA must be attached to the work permit and special circumstances must be listed in the work permit;
  - The IVV supervising the work must be competent and informed about these hazards;
  - The IVV must verify that all involved employees have received the necessary training/instructions.

13. Hazardous and environmentally harmful substances

13.1. General

- The transport, storage and use of large quantities of hazardous or environmentally harmful substances must be coordinated in advance with the HSSEQ manager or safety expert. Written or e-mail approval by PPR is required;
- Contractors must provide Safety Data Sheets (SDS), no older than 3 years and written in Dutch, of relevant substance(s) to the safety expert at least 3 weeks prior to commencement of work;
- When working with hazardous substances, a Work Instruction Card (WIC) must be present;
- Substances must be used in accordance with the agreed procedures, regulations and safety measures;
- Hazardous substances must be reported to security upon arrival, including their specific properties, quantities and storage locations;
- Hazardous substances must be stored in sealed packaging and clearly labeled with the appropriate hazard symbols.

13.2. Working with environmentally hazardous substances

When working with environmentally hazardous substances, preventive measures must be taken in advance to avoid environmental contamination. For example:

- Use of drip trays with appropriate capacity and weather protection.
- Use of double-walled containment.
- Availability of spill kits in case of leakage or possible spills.

13.3. Asbestos and ceramic fibers

Asbestos

No asbestos, asbestos-containing material or ceramic fiber material was used during PPR construction. The Use of these materials is prohibited. If asbestos or ceramic fiber material is suspected or detected:

- the work must be stopped immediately;
- all persons present must leave the work area;
- it must be reported to the IVV.

Any contaminated clothing:

- must be removed on-site to prevent release and/or spread of asbestos or ceramic fibers;
- should be moistened prior to removal to reduce the release of fibers;
- must be stored in sealed bag, labeled as asbestos waste;
- the potentially contaminated area must be clearly cordoned off;
- all work permits issued for work on facilities within the cordoned off area must be revoked.

The material found (the source) must be examined by a certified asbestos inspection agency. If asbestos or ceramic fibers are confirmed, appropriate asbestos management procedures (asbestos regime) must be applied. All Incidents must be recorded in Zenya. And an root cause analysis must be conducted to prevent recurrence in the future.

13.4. Working with Radiation Sources

Radiation is the emission of energy either as waves (electromagnetic radiation) or as particles (particle radiation, such as alpha radiation and beta radiation). Radiation is energy transfer without direct contact.

X-ray source:
An X-ray source is a device used to generate ionizing radiation. If no energy is supplied to the device, no radiation will be released. This is in contrast to radioactive sources which may emit radiation with the same amount of energy continuously.

Isotope:
A radio isotope is an unstable atomic nucleus that decays spontaneously and emits radiation.

Radiation expert:
- Measures radiation levels during work with a radiation source to detect potential emissions;
- Monitors radiation safety and hygiene;
- Develops safety instructions for working with radiation sources;
- Inspects employees, tools, materials or workplace for contaminations;
- Imposes additional measures or stops work if necessary.

Registration of personnel and radiation sources at security

General measures
- Written permission from PPR is required to bring radioactive sources onto the premises.
- All radiation sources must be registered at security upon arrival.

The personnel and the radiation sources to be used must be reported to security and the IVV. A parking permit must also be obtained from security stating:
- Date + time slot;
- Company name;
- Number of persons;
- Type of source;
- The exact location of the work.

Notify on-site personnel/contractors about location of the work
An email and a printed flyer must be prepared in advance with the following information:
- Date + time slot;
- Name and contact details of the performing NDO (Non-destructive testing) company + contact person (IVV) + phone number and contact person subcontractor (if any) + phone number;
- Place of performance (as exact as possible).

The e-mail must be sent to relevant personnel and contractors. In addition, the flyer must be posted in strategic locations (elevators, access doors, etc.).

Securing the work area with the radiation source
The executing company is responsible for cordoning off the work area where the activities will be carried out using black/yellow tape). The size of the area must ensure that dose rates outside this cordon remain below 2.5 µSv/h (zone demarcation) in accordance with NEN-3011.
Activities should preferably be scheduled at times when a few people are present in the area.
Also, wearing a calibrated dosimeter during work is mandatory.

Working with or near (potentially) radioactively contaminated parts or components

Ionizing radiation (by coating, by accumulation of natural radioactivity) can be harmful to the body. The nature and severity of the damage and the probability of its occurrence depends greatly on the degree of exposure.

To work safely, the starting point for receiving radiation dose is ALARA (As Low As Reasonably Achievable).

ALARA is based on the following principles:

- Maximizing distance from the source.
- Minimize exposure time.
- Use shielding between the person and the radiation source.
- Use sources with the lowest possible activity.

Work on/with liners

Work on liners is permitted under the following conditions:

- The presence and use of liners has been reported to the government and a level 3 radiation expert has been appointed;
- Dismantling of the liners is done in a non-destructive way;
- Grinding, sawing and breaking is not allowed due to contamination risk;
- Disposable gloves are worn during the work which are discarded at the end of the work;
- The storage of used, depreciated liners is done in a designated container;
- Liners for disposal must be transferred to a certified ionizing radiation disposal company, either directly or via a licensed intermediary.

Working with X-ray metal analyzers

Companies performing industrial radiography for the purpose of Non Destructive Testing (NDT), such as weld seam inspection, are responsible for safe transportation, use and storage of the X-ray device and ionizing radiation source.

The company must:

- cordon off the area using black and yellow tape, ensuring external dose rate is lower than 2.5 µSv/h (zone demarcation) (in accordance with NEN-3011);
- preferably perform the work at times of the day when the number of people in the place is as low as possible;
- wear a dosimeter while working.

Working with/on radioactively contaminated materials

Other radioactively contaminated materials are:

- Scrap from boiler: contaminated with radionuclides;
- Parts from the flue gas cleaning installation.

If radiation measurements on a load of metal or scrap metal reveal an increased radiation level, further examination must be carried out on the outside of the load as soon as possible. In doing so, it is not permitted to open the means of transport, unload the load or climb on a (bulk) load.

If a load of metal or scrap contains radioactive substances, this must be reported immediately to the "Dienst-Doend-Ambtenaar Toezicht Straling" (DDA) of the VROM-Inspectorate.

Working with/on ionizing smoke detectors

Work on ionizing smoke detectors is permitted under the following conditions:

- Smoke detectors may only be removed in a non-destructive way. However, the detector may be removed from its mounting base;
- Removed smoke detectors are stored in a closed container;
- The smoke detectors will be transported to a certified disposal company.

Work on components of the plant potentially contaminated with radionuclides

All mined mineral, such as petroleum and coal, contain natural radioactive materials. These are released during combustion, whereupon they adhere to the fire hearth walls and burner nozzles and/or settle in the pores of the droplet traps.

Exposure to radionuclides through the respiratory tract, digestive system and during skin contact (open wounds) can lead to various types of diseases. These radionuclides do not penetrate intact skin.

When, for example, wall thickness measurements require the wall to be cleaned of this slack by grinding or blasting, the so-called nuclide procedure applies.

Always perform radiation measurements when working on parts of the installation that may be contaminated with radionuclides. For this, consult the Health and Safety Catalog for Production and Supply Companies in the Energy Sector.

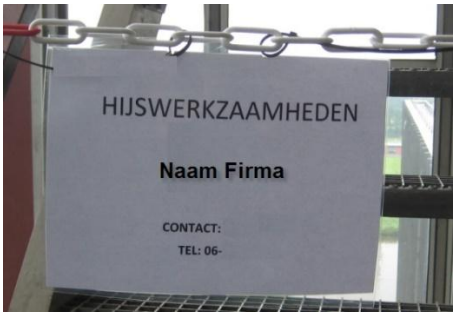
14. Securing dangerous areas

During work activities, certain situations may present high-risk conditions. Depending on the nature of the risk, areas must be cordoned off or shielded appropriately. The decision is made in consultation between the IVV and the contractor. Within PPR, the following types of area cordons are used:

- Solid barriers (guardrails or scaffolding material): used to block openings in floors, walls and platforms to prevent people from falling through. If scaffolding material is used, it may only be installed by a certified scaffolding company;
- Red and white barriers ( ) such as safety fences, chains or tape: used to mark lifting areas or areas with leaks or potential hazards;
- Yellow-black barriers ( ) such as tape or floor markings: indicates areas with increased health risks, such as high-pressure cleaning zones and ATEX zones. ATEX zones must also be marked with the appropriate signs (see chapter 10).

General rules for temporary cordoned off areas

- Demarcated areas are prohibited to unauthorized persons and may be entered, removed or altered only with the permission of the operations team leader or the IVV.
- Tagged and/or locked valves may only be removed and/or operated by authorized employees of operations.
- All barriers must be marked with a label stating name and telephone number of the manager of the barrier.



Signs at temporarily cordoned off/marked areas

If continuous supervision is not possible, additional signage on temporary barriers is required. These must clearly indicate mandatory actions, prohibition and/or hazards present (tailored to the risks to be controlled).

Examples of command, prohibition and danger signs:

15. Excavation work

Excavation work can involve a variety of risks, including soil contamination, damage to underground cables and pipelines, blocking of roads/walkways, collapsing trench walls, choking or intoxication hazards, electrocution hazards and falling hazards. All work involving the displacement or manipulation of soil is included;

- In order to assess the risks, the following information is provided to the infrastructure manager:
  - the scope of the assignment,
  - the target excavation depth,
  - the exact location(s) of the excavation and
  - one or more situation drawings of the planned work;
- If there may be underground cables or pipelines and mechanical excavation is planned, a KLIC notification must be submitted by the excavator. This must be done at least 3 and no more than 20 days days in advance;
- Excavation work may only be carried out with a valid work permit and a corresponding excavation permit;
- A Task Risk Analysis (TRA) is mandatory when excavation work is carried out:
  - on or near underground cable or pipeline routes;
  - in contaminated soil or groundwater;
  - within a distance of 0.5 meters from internal infrastructure such as paths and roads;
  - in the immediate vicinity of buildings or installations in case of danger of subsidence, collapse or tipping.

  The TRA discussion must include the Installation Responsibe Person (IV) and the infrastructure manager;
- The maintenance manager must prepare a work plan. This plan will include at least the following:
  - location and execution period;
  - scope of the work to be carried out;
  - location of the work;
  - working method or excavation method to be followed;
  - measures taken to ensure safety, health and environment protection;
- The IV co-sign the work permit, if excavation work is performed close to electrical installations. The infra manager must authorize the work permit as well. The IVV must review the TRA and work plan before the work permit is reviewed by operations for approval;
- It may happen that the location of cables does not match the location indicated on drawings due to various reasons. To locate the exact location of underground cables or pipes, test trenches must always be dug. Digging test trenches is performed manually. Only the first 0.20 meters may be carried out mechanically;
- For excavation work near electrical installations, the IV for Low/High voltage (LS/HS) must be consulted in accordance with the "procedure for operation of electrical installations";
- When excavating in contaminated soil and/or groundwater, the HSSEQ manager or environmental expert must be consulted;
- When working in deep wells and trenches where the depth equals or exceeds the cross-sectional area of the well or width of the trench, the excavation is considered a confined space (see chapter 8);
- For fire hazard work in pits and trenches, see chapter 9;

- If the excavation becomes deeper than one meter, additional measures must be taken to prevent collapse of trench walls;
- If excavation or earthworks are planned within 5 meters of third-party pipelines and/or cables, a KLIC notification must be submitted at the earliest 20 days and at the latest 3 days before commencement. KLIC will notify the utility owners. The KLIC notification must be available digitally at the excavation site. The utility owner must be involved in the TRA.

16. NEN3140 and NEN3840

To carry out work on and/or operate electrical installations, the contractor's personnel must be designated in accordance with NEN 3140 (for low voltage systems) and NEN 3840 (for high voltage systems). The type of designation must match the work/operations to be carried out. The detailed implementation of this requirement is not specified in this regulation. A separate set of procedures and instructions has been developed for this purpose. For access to those procedures, contact either the EMRA department or PPR's Installation Respinsible Person (IV).

17. Zero Tolerance for Unsafe Behavior

Safety is very important to PPR. We want everyone to return home safe and healthy after work. Prevention is better than cure, which is why we strive for a safety culture where people feel encouraged to address each other **positively** in principle about (potentially) unsafe behavior. To support this, we have established a set of key rules.

If someone deliberately and/or repeatedly fails to comply with these rules, it can unfortunately have serious consequences. PPR has symbolized this with a yellow and red card system to represent these consequences. We call this **"Zero Tolerance on unsafe behavior**." Yellow and red cards can be assigned to individuals or companies, depending on the severity of the violation.

A yellow card is issued to someone if (list is not exhaustive):

- He/she is smoking where it is not permitted;
- He/she walks outside the white lines (designated walkways);
- He/she does not wear Personal Protective Equipment (PPE), work clothes and any additional protective equipment;
- He/she is not working according to the assignment or work permit;
- He/she does not comply with order and tidiness, so that danger arises. For example, tools and materials blocking escape routes, tripping hazards, risk of falling objects.

A red card is issued to someone if (list is not exhaustive):

- He/she uses drugs or alcohol on site, is in possession of drugs or alcohol, or is under the influence of drugs or alcohol;
- He/she smokes in areas marked with explosion or fire hazard;
- He/she works without a valid work permit;
- He/she works without required fall protection in places where it is mandatory;
- He/she improperly removes safeguards, guards, seals and/or deposits unauthorized;
- He/she modificates scaffolding unauthorized;
- He/she operates work equipment without a required valid license or certificate.

PPR supervisors are authorized to issue red and yellow cards. Implementation of the sanctions listed on the red card is reserved for members of the local management team. Any person who receives a red card will be invited for a meeting with their company's management.

17.1. Response to safety behavior

In addition to PPR's "zero tolerance on unsafe behavior" policy, a "green card" may also be issued for exceptionally positive safety behavior.

A green card can be awarded for (for example):

- Structurally proactive safety behavior;
- Addressing colleagues about unsafe behavior;
- Taking initiative to improve safety performance;
- Implementing safety improvement actions.

Green cards are awarded by the site or project management in consultation with the client/location

manager. Rewards may include a letter of justification for the green card, publication and appropriate recognition/conversation with management.

Appendix 1 "OUR LIFE SAVING RULES