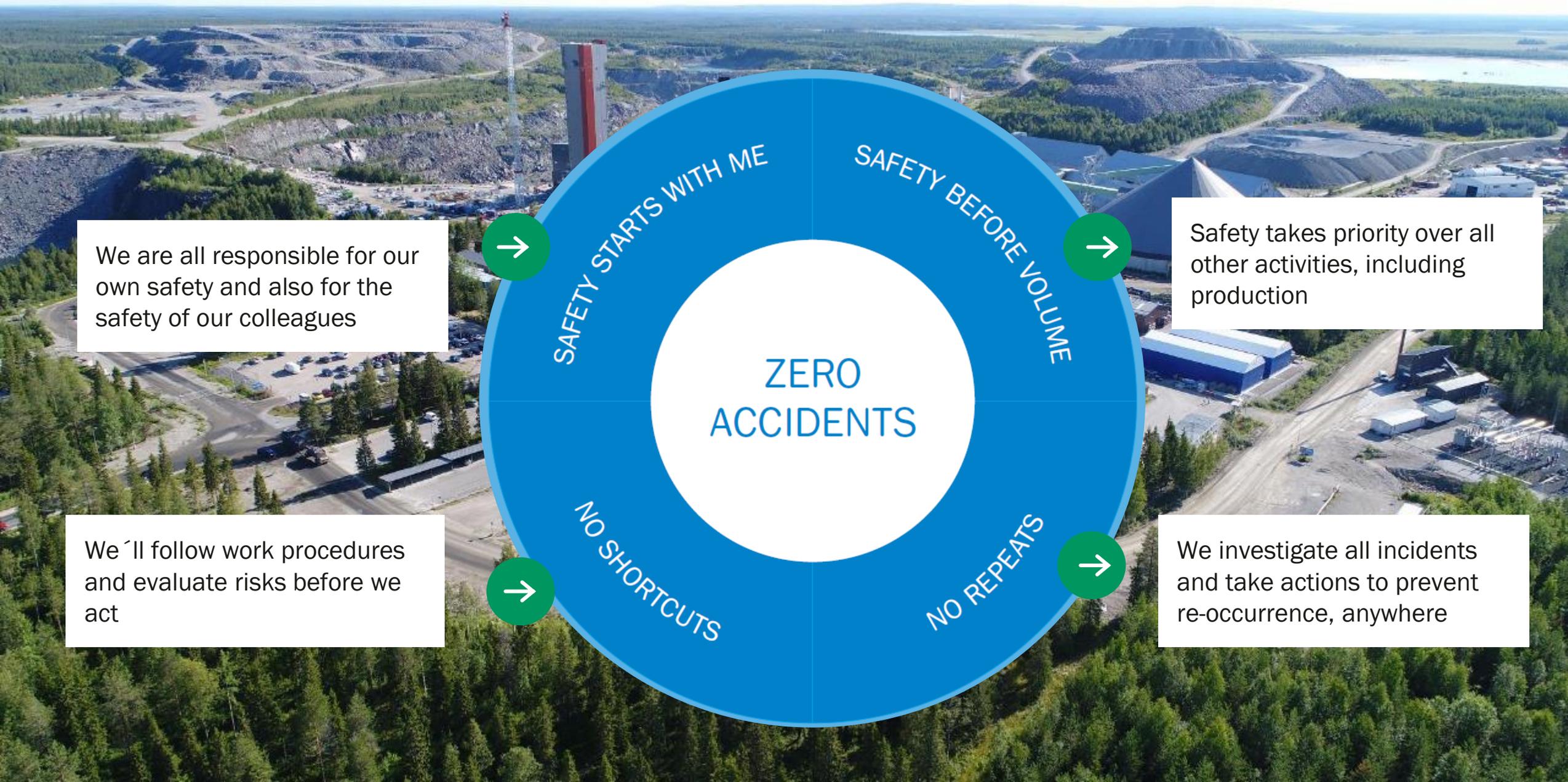




Introduction to Safety and Environmental protection Outokumpu Kemi Mine

Above ground area
Updated 11.4.2022

What does safety mean to us



We are all responsible for our own safety and also for the safety of our colleagues



Safety takes priority over all other activities, including production



We will follow work procedures and evaluate risks before we act



We investigate all incidents and take actions to prevent re-occurrence, anywhere



Learning objectives

During this course, you will learn

- What work safety means in Kemi mine area
- What are the specific hazards of the area
- How you can contribute to work safety by making the work environment safe and by using safe working methods

About the training

- You must pass this training and exam to get access to the Kemi Mine, above ground area
- Training is valid for 12 months

Training is mandatory for contractor employees and Outokumpu employees.

Kemi mine

Kemi mine area is about 900 ha



Kemi Mine concentrating plant area



Hoisting plant

Crushing station

Main control room

Concentrate storages

Crushed ore storage

Parking for visitors and contractors

Heavy medium plant

Grinding Rodmill

Office building

Fine concentration plant

Main Gate and personnel gate

Canteen

Parking for Outokumpu's employees

Safety First!

Safety first!

Outokumpu Kemi Mine Safety Policy

- Our target is **zero accidents**
 - We believe that all accidents can be prevented
 - We evaluate our operations and risks continuously and improve our performance to ensure and improve safety
 - We require that our key suppliers and resident contractors comply with this policy
 - All accidents and near-miss cases are investigated
- Our operations require permit from authorities
 - Authorities such as Finnish Safety and Chemicals Agency (TUKES), Regional state administrative agency (AVI) and Fire protection authorities audit us regularly

Think before you act!

- Safety starts with you
- Before you start working, consider at least these things:
 - Do I know how to perform the task safely?
 - Am I using a correct personal protective equipment?
 - Hazards related to the work?
- Take couple of minutes to think about safety before you start working (last-minute risk evaluation or “Tuumatuokio” in Finnish)
- Think about safety also during working if there are changes in work.



Think before you act!

If you can answer YES to the following questions, you will be able to carry out your work in a safe and secure manner:

1. Do you know how to perform the task safely?
2. Do you have a permission to start the work?
3. Do you have the proper tools and instructions?
4. Are you using the proper protective equipment?
5. Is the work area safe and secure?
6. Are you aware of the risks associated to the work?

If you can't, read the other side.

Unsure? Do the following before you start

1. Find out how to perform the work safely.
2. Find out the relevant instructions.
3. If you observe safety deficiencies, fix them.
4. Ask management or colleagues for additional instructions.

Remember that conditions might change during the task.

**Always follow the instructions!
"Keep it zero" with Outokumpu!**

outokumpu 

outokumpu 



Cardinal Safety Rules

Corporate EHS
Outokumpu

What are Cardinal Safety Rules?

The rules for all of us to apply

All Outokumpu employees, contractors and visitors **WILL NOT:**

 <p>2. Remove fixed guards before operating machinery</p>	 <p>3. Bypass a safety control system</p>	 <p>4. Cross under, through or over process equipment that is operating unless using prescribed walkways</p>
 <p>5. Break procedures for boarding and deboarding cranes</p>	 <p>6. Climb over, under or between railroad cars or trucks</p>	 <p>7. Work on any machinery without first locking out all energy sources</p>
 <p>8. Work at height without using correct fall protection equipment and a rescue plan</p>	 <p>9. Enter a confined space without a second person in attendance outside and a rescue plan</p>	 <p>10. Carry out any hot work unless it is in a designated controlled area or has a relevant permit</p>

Cardinal Safety Rules 

- ✓ A Cardinal Safety Rule is one that, if violated, will pose an imminent threat to the safety of the individual and / or other personnel working around the individual.
- ✓ Deliberate violations of Cardinal Safety Rules will result in termination of employment with the company.
- ✓ Cardinal Safety Rules apply to all Outokumpu employees, contractors and visitors to Outokumpu facilities.

All Outokumpu employees, contractors and visitors **will not:**



1. Attend the workplace under the influence of drugs or alcohol.

Outokumpu employees, contractors or visitors must not be affected by drugs or alcohol while at Outokumpu premises. This may be subject to random testing or testing after an incident.



2. Remove fixed guards before operating machinery.

Fixed guards (e.g. barriers preventing access to moving machinery) on or around machines which are a permanent feature and require removal by a relevant tool must not be removed and left off from equipment before machines are started for operation.

All Outokumpu employees, contractors and visitors **will not:**



3. Bypass a safety control system.

Intentionally defeat the electrical or mechanical safety control system of the machine which may cause injury. This includes purposely navigating around fixed fencing or barrier interlocks.



4. Cross under, through or over process equipment that is operating unless using prescribed walkways.

Employees, contractors and visitors must always use designated walkways to access over, under or through process equipment. Under no circumstances will shortcuts over, under or through process equipment be tolerated.

All Outokumpu employees, contractors and visitors **will not:**



5. Break procedures for boarding and deboarding cranes.

Access to and exit from cranes must be performed from agreed designated access points to ensure the safety of employees and contractors.



6. Climb over, under or between railroad cars or trucks.

It is prohibited to climb over, under or between railroad cars or trucks to eliminate the risk of sudden movements and the possibility of sustaining a trapping and crushing injury.

All Outokumpu employees, contractors and visitors **will not:**



7. Work on any machinery without first locking out all energy sources.

Company LOTOTO (Lock Out, Tag Out, Test Out) procedures must be adhered to in order to lock off all energy sources before working on machinery (maintenance and repair), these will eliminate the chance of machinery being inadvertently started causing injury.



8. Work at height without using correct fall protection equipment and a rescue plan.

All work at height must be assessed before starting the task and performed using the correct protection equipment, this must also include an adequate rescue plan.

All Outokumpu employees, contractors and visitors **will not:**



9. Enter a confined space without a second person in attendance outside and a rescue plan.

All work which involves confined space entry must be assessed before starting the task, and must include an adequate rescue plan which incorporates a second person in attendance who can initiate the rescue plan if required.



10. Carry out any hot work unless it is in a designated controlled area or has a relevant permit.

Designated controlled areas for hot work must be defined and documented (usually maintenance areas) or supplemented by the local relevant hot work permit which includes fire watch duties.

Responsibilities

Responsibilities

Outokumpu

- Is responsible for its own operations' risk factors, their removal and limitation, and the instructions related to them.
- Is obligated to provide the service provider adequate information about safety aspects and requirements, as well as the risks caused to other parties by the Outokumpu's own activities.

Contractor (service provider)

- Must obey Outokumpu's safety instructions when moving or working in Outokumpu plant area.
- Is responsible for managing the work it is given and supervising its employees on the work site, unless otherwise agreed in written form.

Responsibilities

Employees

- The employee must complete the work professionally following the given guidelines and regulations.
- The employee must take responsibility for their own safety, but also for the safety of their colleagues
- The employee must keep their working environment clean and in good order every day
- An employee may not change, on their own initiative, an approved plan of work or an accepted work permit
- The employee's responsibility is to report any changes related to the work to the acting supervisors prior to the start of work or as soon as a change is detected. This includes changes in the work plan, the work or method of work, detecting a hazard, inadequacy or failure of a protection or other safety measure, and / or changes in the end result of the work compared to the planned result

Supervisors

- Giving instructions, guidance and induction to their employees
- Supervision of employees
- Monitoring the working conditions, machines, tools and working methods
- Planning and coordinating of works

Traffic and access control

Road Safety on Elijärventie-road



There is a lot of heavy traffic at Elijärventie due to concentrate deliveries to Tornio plant.
There are wild animal living at the forest surrounding the mine area. Note that they can go across the Elijärventie!



Most parts of the Elijärventie road leading to mine area has speed limit of 60km/h.

Vehicle traffic at Kemi mine

Traffic

- General speed limit on the area (incl. parking places) is **30 km/h** (deviations in speed limits are pointed with signs)
- Standard traffic regulations are complied at Kemi mine
- Use of safety belt is required when moving with the work vehicle
- Only driver may enter Kemi mine area in a vehicle, all passengers must use a personnel gate.
- Driver is responsible for loading and safe transport of the load
- Driver must have a license, written permit and adequate training for the vehicle they operate
- Driver is responsible for vehicle being in service. All work vehicles must use alarm light when moving or operating.
- Outokumpu forklifts are allowed to be used only by trained personnel who have a written permit
- Private motor vehicles (mopeds, scooters and motorcycles etc.) are not allowed to enter the mine area
- The use of mobile phone or other mobile device while using a vehicle is prohibited at Kemi mine area. While using a mobile device will stop and observe the environment

Passenger traffic at Kemi mine

- There is a lot of heavy traffic at Kemi mine area. Use designated routes for pedestrians when possible
- When moving in and out from buildings use personnel doors instead of upward acting doors whenever possible
- When walking in stairs pay attention to the slipperiness and how to carry load – hold the rails at least with one hand. Be careful especially at upper and lower end of the stairs
- Pay attention to the hazards of the crossings: limited visibility and other traffic
- The use of a mobile phone or other mobile device while walking is prohibited at Kemi mine area. While using a mobile device will stop and observe the environment.

Access control

If you face any problems when trying to enter the mine area, please contact Mine Info
+358 16 453 511

Access control and traffic



Kemi mine area is fenced and it is electronically controlled: access control system and camera surveillance



Access to the area is allowed only by **personal** access pass or visitor notice (separate form). Don't let anyone else in with your access pass!



Car parks are located outside Kemi mine area. To be able to enter the area by car requires an application for a special driving permit

Restrictions

Alcohol and narcotic substances

Zero-tolerance towards alcohol



Zero-tolerance towards narcotics

- It is strictly forbidden to use alcohol or other narcotic substances or be under their influence at the workplace!
- In case of a traffic accident or workplace incident involving vehicle or machine at the plant
 - Driver or operator will always be breath analysed with alcometer

Regular breath analyse tests are done



Other restrictions



- Smoking is allowed only in marked places. This applies also for electrical cigarettes
- It is forbidden to bring own gas bottles to Kemi mine. If special gases/bottles are needed, it must be informed before entering Kemi mine
- It is also to forbidden to:
 - Use knives, always use proper tools
 - Use a radio hearing protection/ear plugs during working time (for listening to music etc.)
 - Harass or bully
- Taking photographs or videos without authorization is prohibited. Permit can be applied from Communications department
- Suppliers and other people in the industrial area are not allowed to disclose information related to the production process, economy or other confidential matter to third parties

Jewellery at Kemi Mine

- **Certain jewellery causes a risk of entanglement and therefore is banned from all production, maintenance and laboratory areas.**
- Also loose ties and scarves may cause similar risk. This applies all people in these areas, including visitors.
 - This applies to wristwatches, bracelets, wrist chains, finger rings, loose ear rings, scarves, ties, necklaces and unprotected facial piercing
 - Finger rings that can not be taken off should be taped
 - Hoods and scarves must be kept under clothing
 - Long hair must be tied or protected with hair net
- Exceptions:
 - Medical wristbands and necklaces (for example epilepsy patients). They should always be kept under clothing.
 - Ear rings that do not extend below the earlobe and small nose studs
 - Piercing that is completely covered by clothing
 - Key chains with safety lock that opens if chain is pulled



Areas where the instruction is applied are marked with this sign

Acting against instructions

- **Everyone is responsible to interfere to action that violates safety instructions**
- The penalty depends on how severe, intentional and repetitive the violation is:
 - Notification
 - Written reminder
 - Written warning
 - Notice to remove a person from site if a person receives a second warning within 12 months or the violation is very serious
- Actions are always case-specific
- Actions are applied for Outokumpu personnel and contractor personnel

Safety at work

Avoid hazards by protecting yourself properly

- Using appropriate protective equipment is an easy way to increase your safety at work.
- Below you can see list of mandatory protective equipment in all our departments.



Safety glasses



Industrial safety helmet and hearing protection



Safety gloves that protect you against the hazards of your work



Anti-flame protective clothing



Safety shoes, with penetration-resistant sole

Assess the risks before you start the work!
Examples of hazards related to hand safety:

- Cuts
- Stack wounds
- Chemical exposure
- Burns and frostbites

Examples of special protective equipment required by a specific task or working area



Safety helmets' chin strap

- In places where's a risk of falling when working in heights, the helmet must have a **chin strap attached** under the chin



Welding helmet

- In areas where's an obligation to wear a helmet, a helmet must also be used for welding work



Sealed safety goggles

- When working with an angle grinder and picking machine, use sealed face or eye protection



Respirator

- **Use respirator** when working in dusty work places



Safety glasses on outside areas

- Due to the dust, it's recommended to use eye protection all the time in Tornio site area



Cut resistant gloves

- Use cut resistant gloves when handling sharp tools / materials

Check-in procedures

Safety at work

- Check-in procedures are applied for everyone who comes to the production unit
 - Contractors and Outokumpu personnel from other units
- Before going to the workplace in production unit:
 - Apply for work permit if it is needed
 - Check-in at the control room of the area
- If you are a visitor, check department's visitor guidance!

Tasks that require a written permit

There are tasks in Kemi Mine plant area that require special skills, qualifications and special risk management procedures. Safety of these tasks is ensured with our written work permit procedure.

- 1) When work is supervised by a contractor. Excluding instructed standard work defined by the buyer, works in office and outdoor areas performed by property and maintenance service companies or inspection walks and visits performed by supervisors and work planners
- 2) Prevention of un-expected start up of a machine if there is no written instruction available
- 3) Hot work and hot work on roofs (hot work permit)
- 4) Work done in confined or closed spaces such as containers or exhaust gas pipes
- 5) Working in the danger zone of a crane or near the electrical cables or crane (e.g. construction of scaffolds in such locations)
- 6) Work related to chemical and gas pipes and equipment
- 7) Pressure equipment and related piping
- 8) Work in EX-rooms
- 9) Excavation works in defined areas
- 10) Works with the risk of falling if there is no documented risk assessment
- 11) Working on a straight ladder (only in special cases)
- 12) Troubleshooting in a danger zone while production is ongoing
- 13) Situations where the energies of the machine or equipment can not be completely isolated
- 14) Use of an angle grinder (hot work permit or work permit depending on the working area)
- 15) Other hazardous works specified by the area's management

Prevention of unexpected energization or start-up of machines

Do these steps before starting the work (1. – 4.)

1. Check-in at the main control room at the concentrating plant. At the underground mine check-in at underground production control at 500-level.
2. Make safety isolation when you have a permit to do so
 - Electric energy
 - Flowing substances (chemicals and gases)
 - Hydraulics and pneumatics
 - Mechanical energy
 - Radioactive radiation sources (Radiation sources are switched off only by Outokumpu employees.)
3. Lock-out and tag-out (set switch to 0-position and lock it)
 - Every person locks-out the switch with their own lock
4. Verification (trial start). Call to the control room in the concentrating plant and ask the operator to do a trial start.
 - Pay attention other machines and equipment at the area

When work is completed remove the lock, set switch to 1-position, return the lock to the control room and exclaim clearly that the work is done.

**Follow the procedure also after breaks!
Don't assume that someone has taken care of it!**

Hot work

At Kemi mine all hot works are done according to Outokumpu manual for hot work. This requirement also applies to contractors.

- **Safety procedures:**

- Written hot work permit (only in temporary hot work places) and valid hot work card
- Adequate first-aid extinguishing equipment (never borrow extinguishers from marked places)
- Non-flammable protective clothing and tools
- Inflammable material must be removed and combustible structures protected. Prevent sparks spreading to adjacent space
- Protect conveyors and cables
- At least two hours post hot work guarding



Check-in at the control room at the concentrating plant

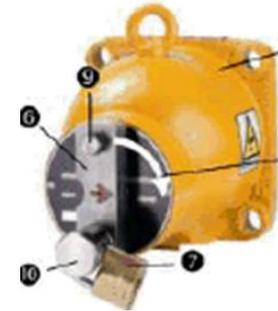
Safety at work



- Sign up to the operator at the desk before going to the workplace
- Make sure that it's safe to start working at the designated area
- The operator gives you instructions and locks for safety isolation
- Access to the main control room is denied

Switching off radioactive radiation sources

- Location of the radiation sources is marked using signs
- Secure always that radiation source is switched off before you go to danger zone
- Radiation sources are switched off only by Outokumpu employees.
 - In the underground mine Outokumpu personnel familiar with the workplace and authorised by the work supervisor
 - In the concentrating plant area Outokumpu personnel in the production department



Danger
Radiation risk

Magnetic fields at the concentrating plant

- At the Heavy medium separation plant there are two demagnetization coils which have strong magnetic fields. People with pacemakers are not allowed to work in the immediate vicinity of the coils.
- Location of the magnetic fields are marked using signs



Isolation of working area and working on top of the other

- Use bars or barrier tape when suitable to isolate the working area if work can cause danger to others: e.g. liftings, working in personnel lift, working in pipeline, constructing scaffolds
- Traffic blocking in outdoor areas must be notified to the foreman of concentrating plant.
- It is forbidden to work on top of the other. Always plan works so that there are no simultaneous tasks going on where employees are working on top of the other (possibility to get injured by falling objects)



Liftings and cranes

- Operating cranes requires a special training and permit
- Use approved lifting accessories designed for that lift
- Use loading tables when selecting the right lifting accessory
- Always check lifting accessories before lifting
- Ensure that load is in balance and that is properly fastened
- **Going under the load is strictly forbidden**
- Don't leave the load hanging
- Use rope or other aid to help to move the load
- Make sure that load is firmly at place before removing the lifting accessory
- Demanding liftings and special lifts must be planned in writing
- Using radio controlled cranes requires adequate training and written permit

Prevention of falling

- **Prevention of falling has to be taken care of in every work situation!**
- Barrier tape is not a railing!
- Opening must be covered immediately or guarding must be arranged
- Best fall prevention system is such that prevents the person to enter to area where falling is possible (selection of rope and anchorage point where it is attached)
- Fall protection harness must be used if fall protection can not be arranged in other way
- Must be used safety helmet with chin strap
- In personnel lifts the fall protection harness attached to the lifting basket must be used at all times

Scaffolding

- Scaffolds are ordered from a service provider (24/7)
- The scaffold can be constructed and modified only by a trained and competent person. Users are not allowed to construct or modify scaffolding.
- Check scaffold visually before using them: **inspection tag**, entry to scaffold, railings, toe board, cleanliness and order of working levels.
 - If you order a scaffolding make sure that the surface and supporting is adequate
- The scaffold must not be used, if it does not have an inspection tag
- Building a scaffold to a danger zone of a crane requires a written permit



Electrical safety

Electrical safety instructions

- If a tool is defective, prevent its use, mark the defect and send the tool to service
- Pay attention to devices with high voltage for example **conductor rails of cranes**.
- Entry to electric rooms requires permission and special training
- Check safety instructions when working in moist and conductive surroundings such as metal containers
- Extension cords must not cause danger:
 - Pay attention to possibility of tripping
 - They must not prevent fire prevention door from closing or be broken under closed door
 - Extencion cords going through passages must be properly marked and protected

Entry to electric rooms requires permission



Cleanliness and order

- Everyone must keep their workplace in order every day
- Walkways and stairs must be kept clean
- Tools and equipment must be stored in a place where they can not cause any hazard
- Cleaning up is one part of the work
- Remember that for different waste there is different collecting/recycling places
- **When you go to the staff canteen, the upper part of the protective clothing must taken off (protective jacket) or the upper part of the overalls should be lowered to the waist**

Uncleanliness and
unorder increase the
risk of falling and
tripping.

It also increases the fire
burden.

Keep your work place
clean!

Environmental protection & Biodiversity

Kemi mine and environment

- We have principles for environmental protection:
 - All our processes are operated so that emissions and effects to air, water and soil are as minimum as possible. We require our contractors to follow the same policy.
- If there is an environmental accident at the Kemi mine for example oil leak from a vehicle or chemical leak, it requires immediate actions:
 - To minimize the environmental effects
 - Accidents must be reported to supervisor and in case of a major leak also to Outokumpu personnel (contract supervisor or foreman)

Kemi mine - Biodiversity

Biodiversity = biological variety and variability of life on Earth – flora and fauna have their own meaning in the nature, as well position in the food chain

The aim is to preserve and promote the biodiversity of the mining site and nearby as well take it into account in changes

- The natural fauna, flora, and biota of the mining area have been identified
- These must be taken into account when planning new operations

The aim is to reduce and manage environmental impact of the mine

- Dust management measures
- Oil spill prevention and response
- Water management measures
- Energy efficiency targets and projects

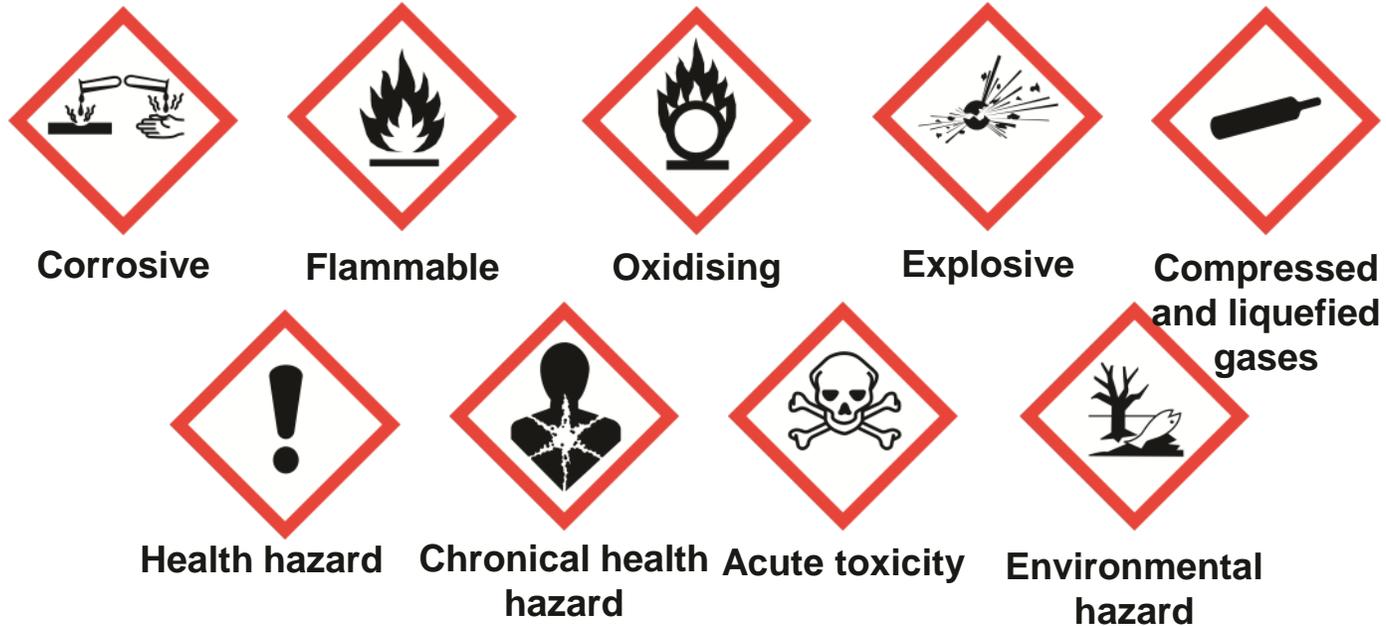
The aim is to maintain and promote the diverse living conditions of the biota, fauna and flora of the forests in mining area and nearby

- Fish plantings
- Construction of nests for birds and lairs for animals
- Planting of flora characteristic for the mining site

Chemical safety

Warning signs

- There are several different kinds of chemicals handled in Kemi mine e.g. gases, process chemicals, lubricants and chemicals for maintenance purposes
- More information can be found from their material safety data sheets



Some hazardous chemicals at Kemi mine



Highly flammable substances

- Propane gas
- Liquefied natural gas (Methane)
- Acetylene
- Fuel storages and liquid fuel tanks

Explosives

- Mining explosives and detonators



Chronical health hazard

- Carbon monoxide
 - May damage the unborn child



Oxidising substances

- Oxygen



Other

Also aerosols are handled and stored at the plant

Chemical safety data sheet

Always check the chemicals used and stored at the working place!

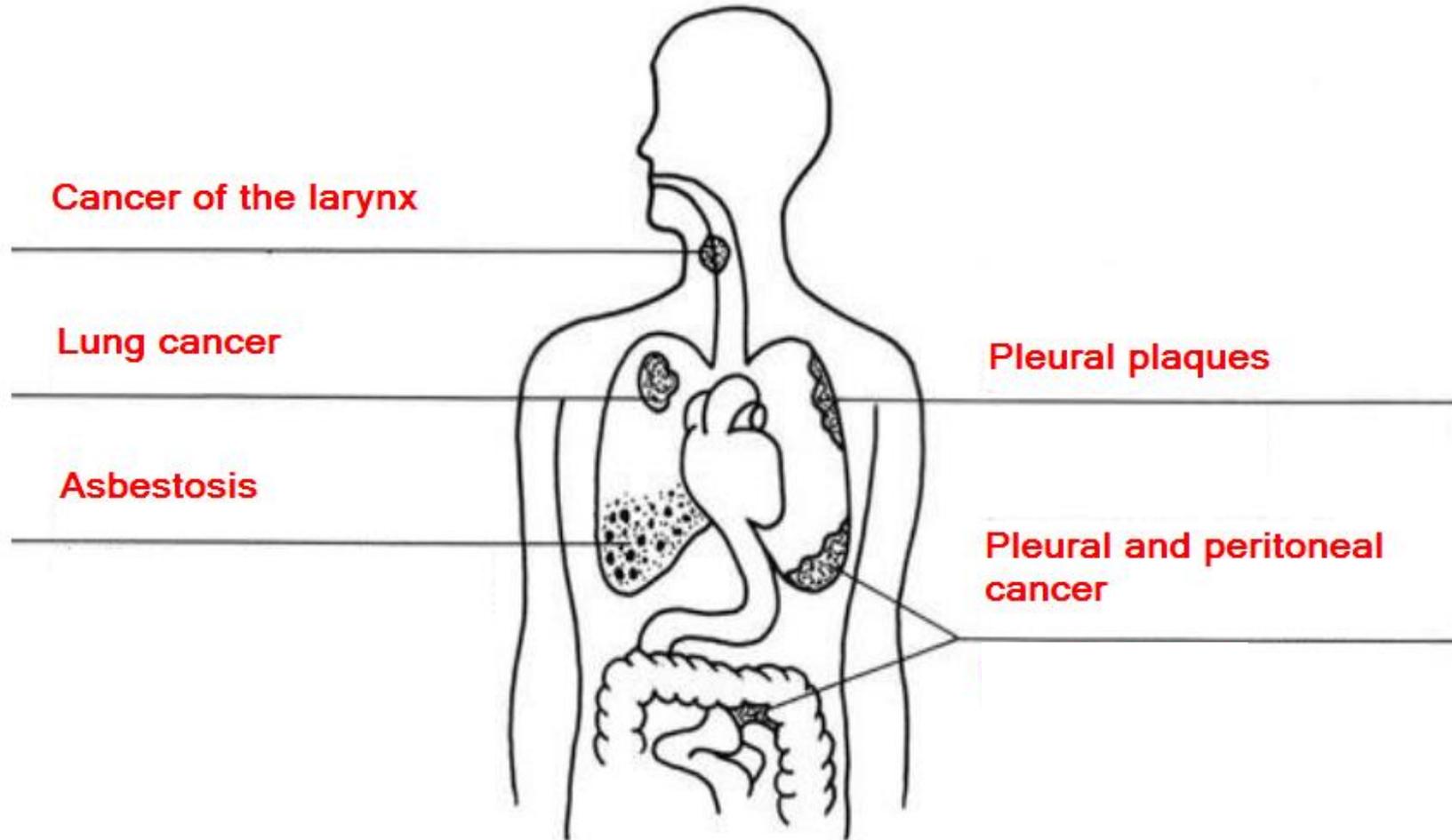
Information can be found from the material safety data sheets.

Hazards of the production units

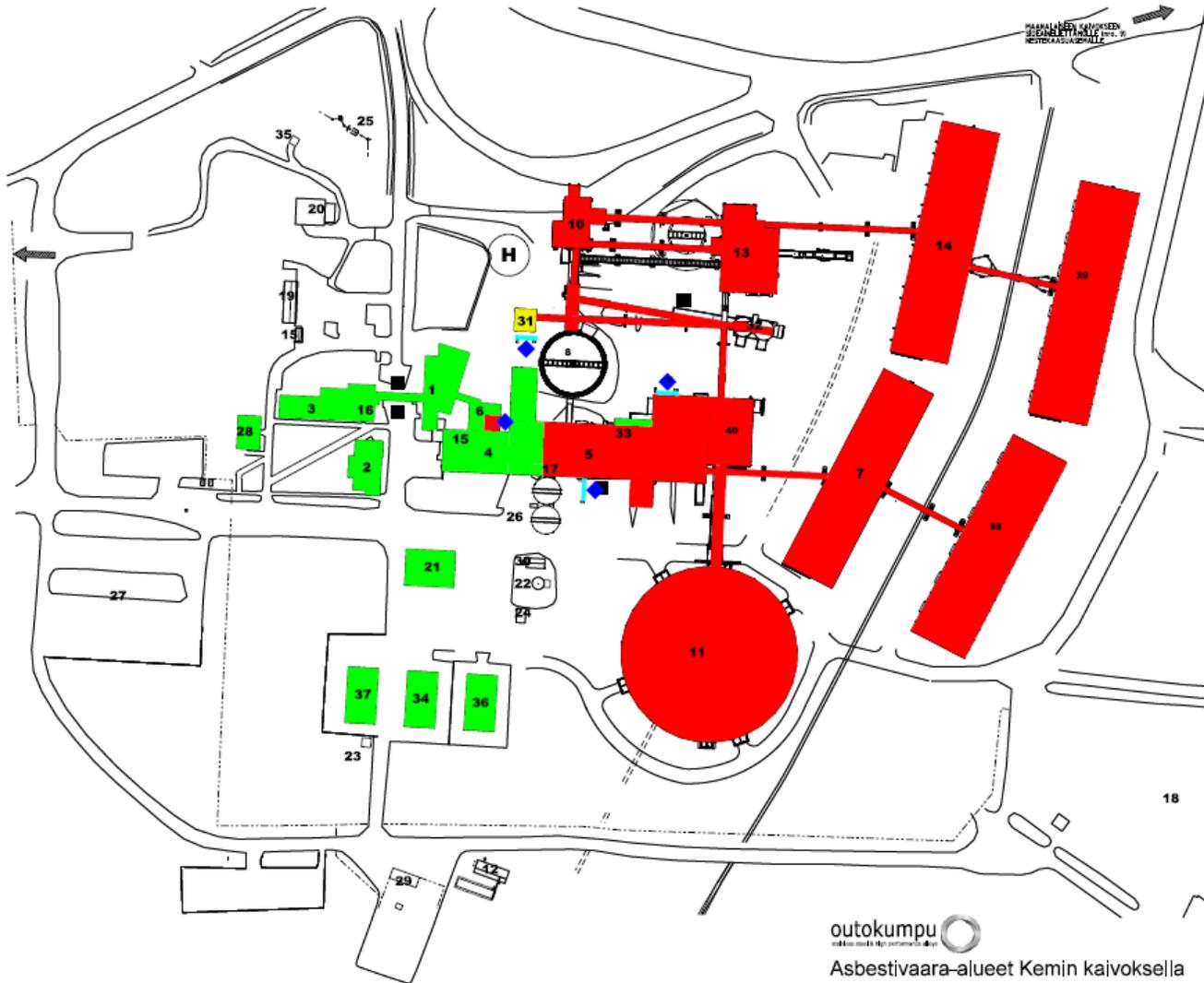
Hazards at Kemi Mine

- Asbestos
- Noise
- Traffic
 - Concentrate transportation, concrete, fly ash, slag, propane, explosives, maintenance related traffic

Asbestos related health hazards



Asbestos at the concentrating plant



Use respirator with P3 category particle filter and disposable overalls

Respirator with P3 category particle filter

No respiratory protection required

- ◆ Asbestos waste bins
- Asbestos decontamination container

Protection against asbestos

General instructions

- When working or moving in areas that contain asbestos you **must use respiratory protection**
 - < 2 h → half mask with P3-category particle filter
 - > 2 h → filtering device with fan unit with P3-category particle filter (minimum TH2 approved)
- Minimize the spreading of the dust: use the decontamination premises
- Eating, drinking and smoking are forbidden in areas containing asbestos

Yellow area – possible risk

- Current shaft tower is yellow area
- Normal working clothes can be used in non-dusty conditions
- In dusty conditions (e.g. maintenance) disposable overalls are required on top of normal working clothes in yellow area

Red area – Significant risk

- In the red areas respirators and disposable overalls are required in all duties!



Disposable respirator is forbidden in Kemi Mine

ASBESTOS DANGER

Inhaling the dust is dangerous



Yellow area

- Buildings that contain asbestos are marked using following signs
- Respirator must be worn



Red area

- Buildings that contain asbestos are marked using following signs
- Respirator and disposable overalls must be worn



Asbestos decontamination containers

North side of Grinding Rod mill



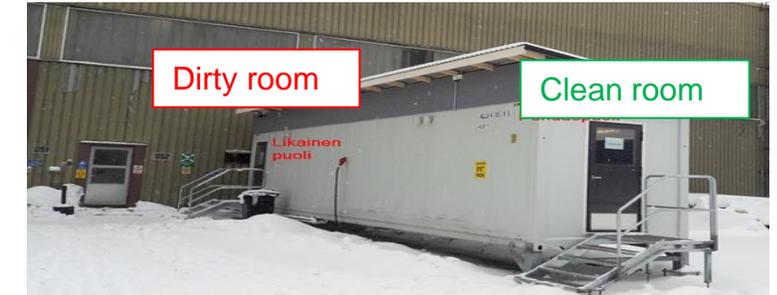
- When exiting asbestos area, you must clean yourself at decontamination container
- This is done to avoid spreading the asbestos fiber to clean areas

Next to Hoisting Plant



- Go inside the container to the dirty room and after decontamination exit the container from the clean room

South side of the Fine Concentrating Plant



- Use the respirator during the decontamination

Using the decontamination container

Dirty Room

Use respirator when you clean yourself at the dirty room

1. Wash your shoes
 - Wash your shoes properly with the shoe scrubber
2. Vacuum the dust
 - Vacuum visible dust from disposable overalls
 - Vacuum the outside of your helmet and filtering device with fan unit.
3. Undress your disposable overalls
 - Remember to keep respirator on your face when you undress yourself.
4. Place your overalls into the asbestos waste bin.
5. Clean the room after use.
 - Wash the floor with a water hose.

Clean room

You can remove the respirator at the clean room.

1. Wipe your powered air respirator/ half mask with damp paper.
2. Wipe your helmet with damp paper.
3. Wash your hands.

Emergency management

Emergency management

Alarm numbers

Kemi Mine emergency number

+358 16 45 3737

Save the number to your phone!

Emergency number

112

Call Kemi Mine emergency number first

The Kemi Mine Fire and rescue team is sent at the site of emergency straight away

In case of resuscitation (CPR), after calling to the Kemi Mine emergency number, also call to the emergency number 112. So that emergency care can receive situation information directly from the emergency site.

- Keep calm and state your name and explain what has happened
- Accident or an acute illness?
- How many people were injured?
- Accident location?
- Are there more people in danger?
- Answer all questions logically and do not hang up until you are given the permission to do so
- Guide the emergency staff to the accident site
- Inform the supervisor and the personnel in the main gate

General instructions for emergency situations

When arriving first to the accident scene always evaluate the situation.

Don't risk your own safety.

1. **Evaluate**
2. **Rescue**
3. **Emergency call**
4. **Extinguish**
5. **Guide**
6. **Restrict**
7. **First aid**

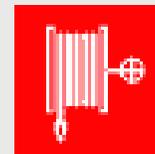
Signs



Fire alarm



Portable fire extinguisher

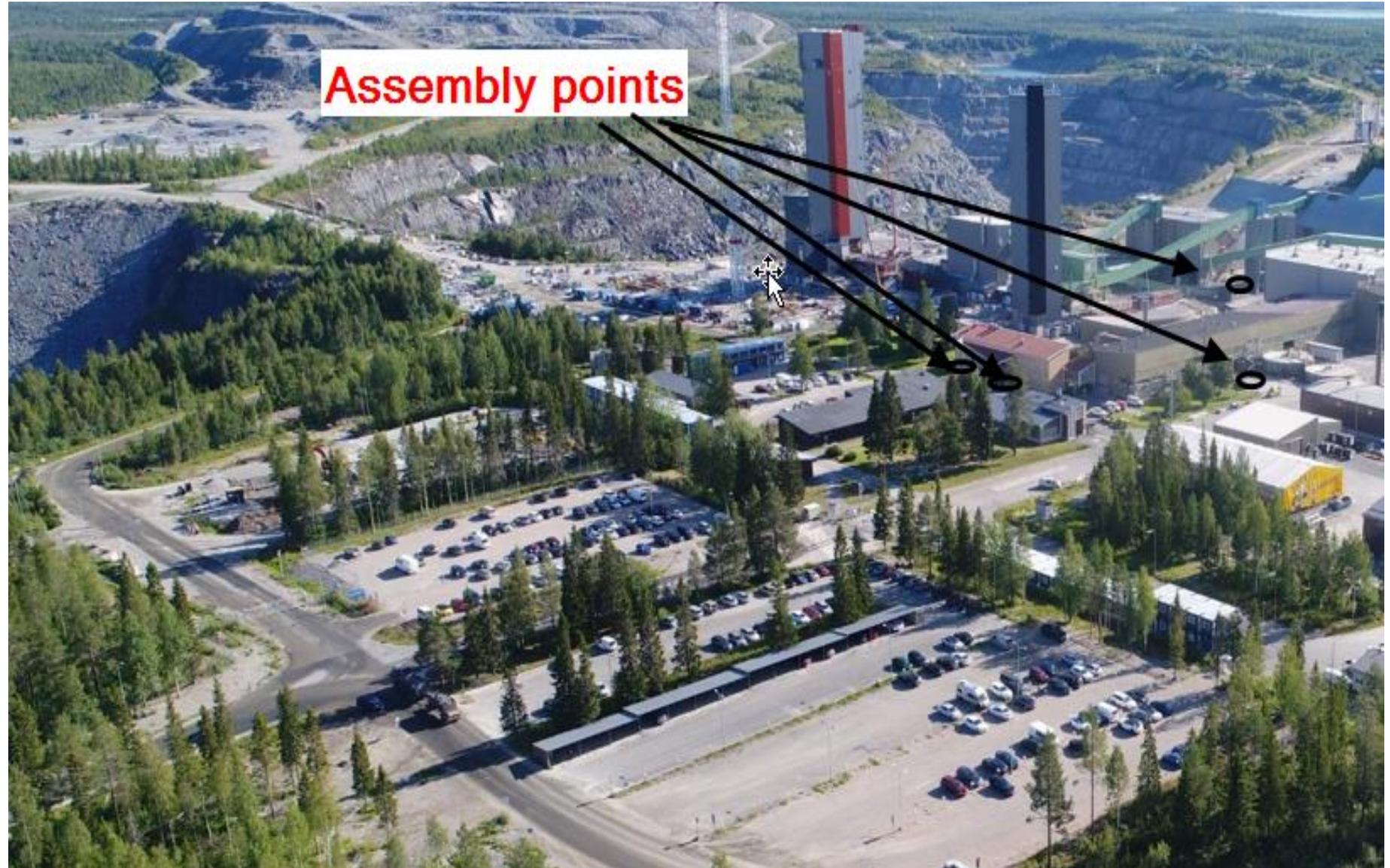


Fire plug

Assembly points at Kemi Mine

In evacuation situation
move to assembly point

Always use stairs – you
may be trapped in to
elevator



First aid - chemicals

Skin

- Remove immediately contaminated clothing. Wash skin with plenty of water and soap for at least 15 minutes.

Eyes

- Flush your eye with water for at least 15 minutes keeping eye lids open. Prevent the water from getting to the clean eye.

Breath

- Move person to fresh air, half-sitting position.

Mouth

- Help rinse the mouth. Give couple of glasses water. Do not induce vomiting.

Always contact medical personnel

Notifications

- **Make immediate** notifications to foreman and Outokumpu contact person of all:
 - Work place injuries at Kemi mine area including social premises and parking lots
 - Hazards and near-miss cases
 - Fires
 - Environmental damages and material damages
 - Chemical and gas leaks

When you enter the work place

- Ask for work place induction from the supervisor
 - Moving in/to the area
 - Personal protective equipment
 - Risk factors in the surroundings (chemical, physical)
 - Accident risks
 - Emergency exits and evacuation points
 - First-aid equipment, emergency showers, eye rinsing places /-bottles, fire-extinguishers
 - Safe places in gas leak situations
 - Waste collecting and recycling points
 - The number of the closest door
 - Contact person(s), closest control room

