SITE SPECIFIC SAFETY
SIILINJÄRVI

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1 General

1.1 Purpose and scope of application

These instructions define the rules for traffic, working and moving in the mining area. Also moving to the mining area is part of the work. These instructions have been added also to the mining area's function specific induction material, which everyone working in the area needs to do yearly. Only staff of Yara Suomi and its contractors who have received the required induction to these instructions may move around in the mining area.

Due to the heavy site transports, variable conditions and the nature of the operating environment, the mining area features risks of severe accidents. The purpose of these instructions is to inform anyone moving in the mining area about its special characteristics and to provide guidance for safe traffic in the area. The area to which these instructions pertain is defined in chapter 2.

Yara Suomi Oy is not responsible for any damage to private cars or machines in the area.

Yara Suomi Oy has the right to use external parties in monitoring compliance with these instructions.)

2 Mining area

The mining area, to which these instructions pertain, is 10 kilometers long and 5 kilometers wide. It consists of the Särkijärvi, Saarinen and Jaakonlampi open pits, primary crush, banking areas, dam areas, the paste plant, the transport contractor's depot areas at the Saarinen and Särkijärvi pits, the spindle crush and the roads that connect all of these sites. Because the area is wide, be sure that you are aware of your working location in case of a possible emergency situation. The area of the Siilinjärvi mine is presented in image 1.

2.1 Paste plant

A paste plant, which is a part of the concentrating plant, operates in between the Musti tailings pond area and the Saarinen open pit at the mining site. When at the paste plant, take note of the blasting work at the Saarinen open pit.

2.2 Underground pump house

An underground pump house for quarry water is located at the bottom of the Särkijärvi open pit. The tunnel is accessible via access control and working there requires a work permit. VHF radios work in the tunnel. Working in the underground pump house requires completing a separate induction. The route to the pump house can vary as the blasting work is on, therefore make sure the route to the pump house from the mine's specialists before entering.

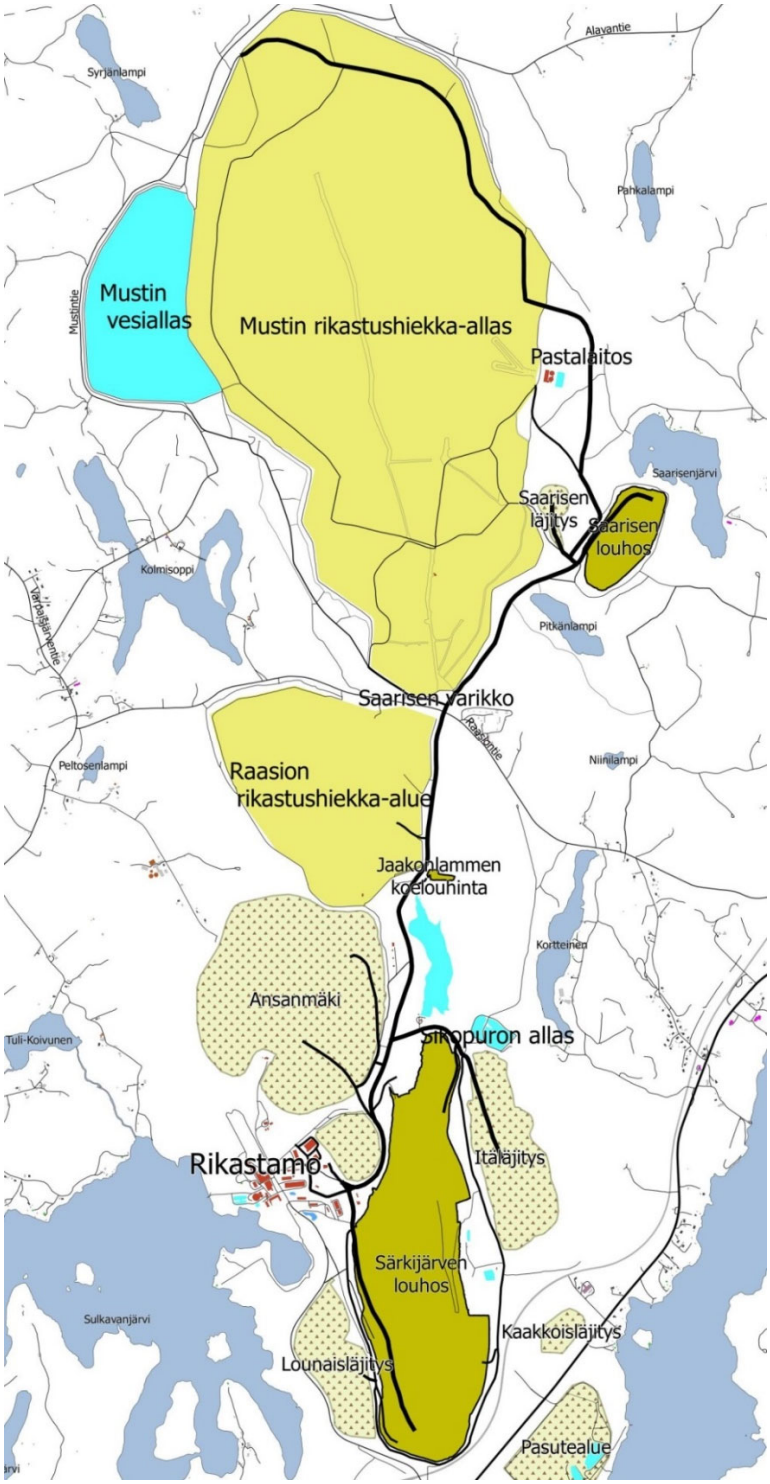

Image 1. Siilinjärvi mining area

3 Traffic in the mining area

This chapter contains instructions that must be observed by all moving in the mine area indicated in chapter 2. Practices for visitors to the mine are explained in detail in chapter 6.

The authorities (the police and the rescue services) may move around freely in the mining area in order to perform their duties without the required induction.

Any commuting for work through the mining area is forbidden.

As a rule, the gates at the factory and mining area are kept closed. When going through the gates, you must ensure that you leave them closed and locked.

3.1 Vehicles

As a rule, using any vehicles other than off-road vehicles at the mining area is forbidden. One-off work tasks, such as projects, forestry management etc., anywhere in the main area except for the open pits are an exception to this rule. Exceptional permits for using a car for transport to such work sites are given by the issuer of the work permit and indicated on the permit. In the open pits, using any cars other than off-road vehicles is forbidden at all times.

The vehicles must be in a condition similar to that at the annual vehicle inspection, with the exception of hauling trucks for the quarry material, work machinery and separately agreed vehicles, which must have undergone a service and an inspection as specified by the manufacturer. Before starting, all vehicles and work machinery must be subjected to a departure test (cf. SSJA). In the test, the condition of the tyres, lights, safety flag, windshield washer fluid, general cleanliness and the operation of the brakes, for example, are checked. If defects are detected in the vehicle or machine, it may not be used before the defect has been repaired.

All vans and off-road cars must be equipped a safety flag attached to the mast of the vehicle. The height of the safety flag from the ground must be at least 3.5 metres. In addition, all vehicles, with the exception of hauling trucks, must be equipped with a yellow flashing light, VHF-phone, wheel chock, powder fire extinguisher (min. 6kg) and a first-aid kit.

If necessary, the issuer of the work permit shall lend a VHF phone, wheel chocks and safety flag against a receipt to all external contractors working temporarily at the mine (category 3 companies). Other equipment are the responsibility of the contractor at their own cost. The need for a VHF phone is defined specifically for each work permit / project, depending on where in the mine’s area the work site in question is located.
Once the work is completed, the VHF phone must be returned to the issuer of the work permit.

The issuer of the work shall inform the requirements of the vehicles when ordering the work.

3.2 Traffic

Entrance to the mining area is allowed only through the main gate.

The traffic regulations of the Road Traffic Act are observed everywhere in the mining area (please note: seatbelts and hands free equipment must be used). Pay attention to the traffic signs! As an exception to this, hauling trucks have the right of way. Other vehicles must at all times give way to hauling transportation traffic.

The speed limit at the mining area is 40 km/h, unless otherwise indicated. At the contractor's depots and the concentration plant area the speed limit is 30 km/h. The driving speed must be at all times adjusted to the quality of the road, visibility and the other conditions, so that safety is never compromised and the driver can control the vehicle in all circumstances. Please note that dust and fog reduce visibility and sludge may make the roads slippery.

For vehicles driving one after each other, a sufficient collision avoidance distance, taking the conditions into account, must be kept at all times. The minimum collision avoidance distance is 30 metres. This distance also applies to hauling trucks. In overtaking situations, a safety distance of at least 5 metres must be kept at all times and in all directions from the vehicle or work machinery. Do not overtake hauling trucks if it is not necessary. Overtaking any vehicle at a crossing is forbidden.

If the route you are going passes the work machine's working area, ask always permission through the VHF phone from the work machine's operator for passing. The permission needs to be asked also if you need to pass a standstill hauling truck from any direction or if you pass the crusher from under 40 meters away from it. Notice also that there is areas, to which the entering is allowed only for hauling trucks or service traffic.

Vehicles or work machinery must be parked on as flat surface as possible, with the parking brake engaged, and the steering wheels directed towards a wall or similar obstacle. In addition to this, parking must be secured by setting wheel chocks in front of the wheels if the parking area is not flat. Never park close to a hauling truck or work machine, to which the operator cannot see you from the vehicle.

In the mine area's traffic, pay attention to the Yara's sixth golden rule regarding traffic.

3.3 Using VHF in the mining area

When moving in the mine area, there shall always be a VHF-phone in the vehicle, which is switched on. The VHF-phones in the mine area have following channels in use:

- 1 Enrichment plant 1
- 2 Enrichment plant 2
- 3 Enrichment plant 3
- 4 Maintenance 1
- 5 Maintenance 2
- 6 Maintenance 3
-
- 7 Räjäytys, panostus, poraus
- 8 Loading and transport
- 9 Traffic organizer info
- 10 Mine projects 1
- 11 Mine's main channel (listens 7 and 8 , speaking only to 8)
- 12 Mine projects 2
- 13 Channel through which a warning can be send to all VHF phones in the area.
- 14 Mine projects 3
- 15 Mine projects 4
- 16 Safety room

This channel list is in use only in mine area's VHF-phones. The system can include 4 calls at the same time. When moving to the working area, channel 8 shall always be used to ensure safe and fluent traffic. In the actual working area, a prearranged channel shall be used. The VHF network has limited capacity, therefore its important to keep the discussion short and relevant.

3.4 Special features of the mine area

The mine has features, that are diverging from the other functions of Yara Siilinjärvi. Acknowledging these features allows safe and fluent traffic and working in the mine area. In this section, these special features are gone through.

3.4.1 Wall safety

In the mine, different sizes of collapses and rock falls happens every year. These collapses are usually started by blasting work or rains.

The mine walls are followed by radars, which are warning about larger collapses. The radars cannot detect smaller falling rocks. The large collapses usually start with small falling rocks and therefore its important to inform the personnel about the smaller falling rocks. Also large moving areas are being isolated. The isolations are described more in detail in the next chapter.

3.4.2 Area isolations

In the mine, its sometimes needed to isolate areas and close roads, because of the working in the upper levels or risk of collapse. Even if the working happens in the upper levels, the rocks can fall long distances to the lower levels.

Pushing rocks over the level's edge is always forbidden. If there anyway is a risk that the rocks may fall to the lower levels without control or the work cannot be done in a safer manner, it is needed to prevent the access to the lower danger area. Preventing the access is done by sending guards to the roads leading to the danger area or closing the roads with warning cones and flag line. Before closing the area, it is needed to make sure that there isn't anyone in the danger area.

Pay attention to the following when doing area isolations:

- Marking the closed area shall be clear. Use enough warning cones and flag line, so that closed area is clearly visible. Only warning cones are not enough for the marking. Remember to mark the reason for the area isolation, in addition the contact information of the person who is responsible about the isolation to the sign.
- If a road is closed, the road block shall be put to both end of the closed road.
- When the danger is over, take the warning cones out from the area. Extra cones in the mine area makes the closed areas insignificant.
- The management of the alliance and Yara's personnel are responsible of the area isolations in the mine. Everyone is responsible to make the isolation when noticing a situation that needs it. Ending the isolation is done by the alliance management, if the risk is caused by work machinery. If the risk is caused by possible collapse, the ending of the isolation is done by Yara's mine's personnel.

Going to isolated area is against the golden rules of Yara.

3.4.3 Working near the mine's edge or under the walls.

When working or walking under three meters away from the mine's edge, safety harness shall always be used. Works done with machinery (drilling, loading, etc.) have own work-specific instructions.

Working and moving under the walls have own specific instructions, which have been described better in the low risk work description. Moving by walking under the walls requires always a work permission. Machinery works have own specific instructions.

3.4.4 Road network in the mining area

Due to the varying production circumstances, the roads in the mining area change constantly; old roads are taken out of use and new roads are built. Therefore, you should always stay alert and pay attention to your route, crossing areas in particular. When getting closer to a crossing area, lower your speed and pay attention to your surroundings, also behind you. Prepare to stop and give way.

The open pits and heap areas have three kinds of roads, that are shown in figure 2:
- Service road has been dimensioned to smaller vehicles (passenger transport, vans, trucks).
- Level road has been leveled and dimensioned for the hauling trucks.
- Ramp is a tilted road dimensioned for the hauling trucks.

The ramps of the mines and heap areas have always the priority. Traffic from the level gives always way to the traffic coming from the ramps. Remember that the hauling trucks have always the priority.

Please pay attention to the road maintenance machinery and vehicles as well as any rocks that have fallen off the trucks when moving around the mining area. The rocks can roll tens of meters. Pay attention to this when facing the hauling trucks.

Contractors are responsible for road maintenance. Tapojärvi Oy is responsible for the roads used for the transport of ore and waste rock. In the summer, the maintenance of transport roads for ore and waste rock entails dust suppression by watering and salting the roads and sludge removal; in the winter, snow-ploughing and antiskid-treatment, removal of rocks that have fallen off the trucks and maintenance of roads with quarry gravel and crushed stone.

The maintenance of the rest of the roads (dam areas, pump houses etc.) is the responsibility of other contractors on a case-specific basis.

Figure 2. Types of roads in the mine.

3.4.5 Machinery transports

In the mine area, the excavators are transported with certain transfer wheels. In the machinery transporting, 1-2 hauling trucks pulls the excavator equipped with the transfer wheels. This machinery transport is long, wide and slow. The machinery transport is always informed through the VHF phone in channels 7 and 8 before starting the transport. The machinery transport has always the priority and bypassing is forbidden without permission. Bypassing in the ramp areas is totally forbidden.

Figure 3. Machinery transport with hauling trucks.

3.4.6 Crushing

In the mine, crushing large rocks is done with impact hammer. During the crushing, stone material can fly away from the impact hammer which can cause severe damage to where it hits. The danger area is 40 meters away from the impact hammer. Permission from the impact hammer operator shall always be asked through VHF phone before entering the danger area (channel 8).

Danger area 40 meters

Figure 4. Crushing work and the danger area.

3.4.7 Raasio's crossing

Between Musti's and Raasio's tailings ponds goes Raasio's road, which is a public road (Figure 1). The crossing includes traffic light control. The green light priority is for civil traffic and for mine area, red light is the priority. The traffic lights include a detector, which swiches the lights to green, when a vehicle from the mine is coming closer to the lights. Even if the lights are green for the mine's traffic, pay attention to the Raasio's road's public traffic.

3.4.8 Gas hazard alarm

During the gas hazard everyone from the Särkijärvi's mine must go calmly to the nearest gathering place. The gathering places are shown in the figure 5. Everyone shall exit the machines and vehicles calmly to avoid stumbling. The mine's location is further away from possible leaking points and the gas cloud dissipates to the wind before it comes to the mine area. There is therefore enough time to go calmly and safely to the gathering place. Gas hazard alarm stops each working permissions. Everyone must wait after the gas hazard alarm that permission to return to the mine has been given.

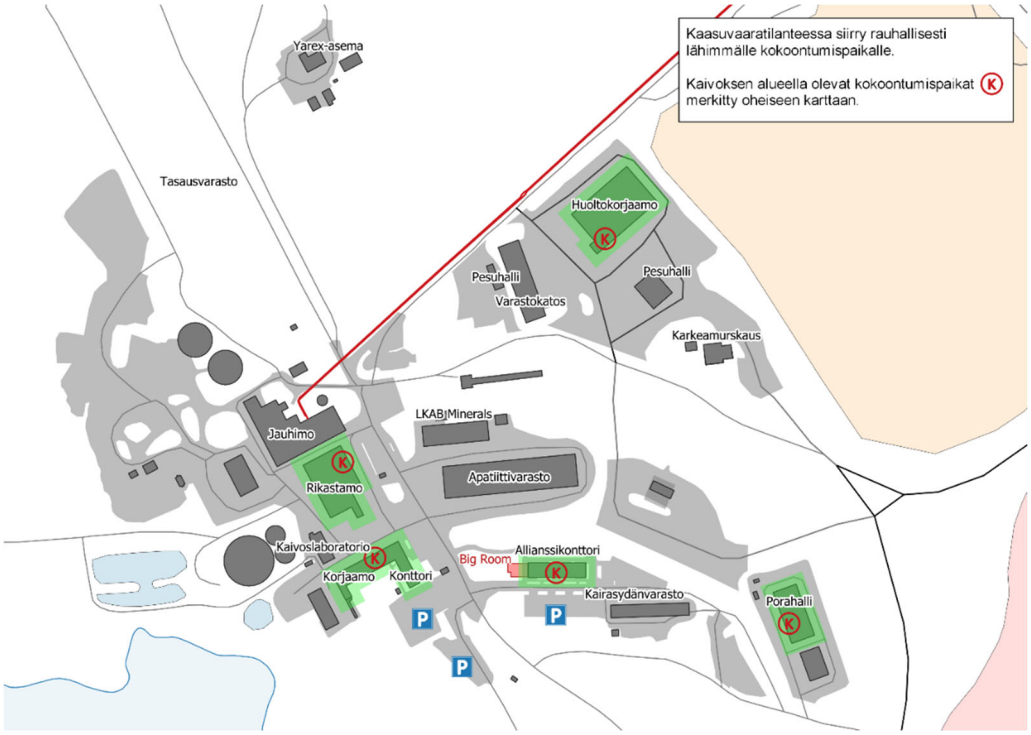

Figure 5. Gathering places in the mine area during gas hazard alarm.

3.4.9 Gas accumulation to the mine

In unfavourable weather, the exhaust gases can begin to accumulate to the mine. In that case, the air starts to look like yellow or layered, or in the dark the lights start to scatter in an unusual manner.

If exhaust gases are suspected to accumulate to the mine, a gas meter suitable for NOx- gases is taken into use. The measurement is taken from the working points and roads leading to them so that the exhaust gas of the own vehicle doesn't affect to the measurements. If measurements are taken to measure contents, the results need to be ensured with another gas meter. If both gas meters show contents, the work management, Yara's mine department's representative and Yara's safety specialist needs to be notified.

If the mine is decided to be emptied based on the measurement results, the area shall be isolated following the paragraph 3.4.2. Each road leading to the mine shall be isolated and outsiders' access shall be prevented.

Table 1. TLV values

Substance	TLV 8h	TLV 15min
CO	20 ppm	75 ppm
CO2	5000ppm	-
NO2	0,5 ppm	1,0 ppm
SO2	0,5 ppm	1,0 ppm
NH3	20 ppm	50 ppm

3.4.10 Outsiders in the mining area

Due to the sheer size of the mining area, it is always possible that unauthorised outsiders may gain access to the area. This may include regular cars without a host from Yara or its contractors, not equipped with safety flags and/or flashing lights, or pedestrians dressed in normal, non-workwear clothes.

Anyone working in the mining area who notices unauthorised vehicles or persons must warn others in the area of this immediately using the VHF phone and remove the outsider from the mining area immediately. After this, the outsider shall be brought outside from the mine area. All such incidents must be reported to Yara in accordance with the incident reporting practices.

4 Blasting safety

Blasting work is executed at both the Särkijärvi and Jaakonlampi open pits one to two times per week on varying weekdays. This chapter describes risk factors related to charging and blasting, which all moving about in the area must be familiar with. If necessary, more information can be obtained from the mine staff or the blasting work manager working at the time. Watching explosions from roads leading to the mine or elsewhere in the area at risk of flying rocks is strictly forbidden without the explicit, case-specific permission of the foreman of the explosion work.

4.1 Charged fields

Due to the nature of the charging work, open pits always include charged fields that are being prepared for the next blasting work. Moving about in a charged field and between large boulders (breakages) left behind from blasting work is strictly forbidden without the permission of the chargers. The breakages and charged areas must be marked visibly with red flags. In addition, moving and working in charged area has its own work instruction.

On blasting work days, the chargers prepare for the blasting by drawing shot-firing cables from the fields, breakages, toe holes etc. close to the blasting site. The cable is marked with flags. Avoid driving off road on blasting days. If a road is closed with a flag, access in that direction and to that area is no longer permitted. Driving over a blasting cable will break the cable and move the blast.

4.2 Actions to take in the event of a fire in a charging vehicle, the AN prill storage of the Yarex station or explosive storage

In the event of a fire in a charging vehicle, an emergency warning will be issued via the VHF phone. In the emergency warning, the danger area is told, which depends on the charging vehicle’s location. Once you have heard the warning, exit the danger area immediately. You must observe the orders issued by the blasters and rescue professionals on site at all times.

In the event of a fire in the Yarex station, explosive storage or AN prill storage, you must observe any orders issued by the blasters and the rescue professionals.

4.3 Blasting work

4.3.1 Notifying of and executing blasting work

At the Särkijärvi open pit, the blasting date and time is indicated with a yellow flashing light, which is located close to the gate of the mine. Another flashing light is located on the roof of the gyratory crusher manager’s booth. The time of the blasting work is usually 1.45pm. The exact time is defined by flight and rail traffic, with a tolerance of ±15 minutes from the time indicated with the flashing light.

At the Jaakonlampi open pit, the flashing light indicating blasting work is installed next to the road leading to Jaakonlampi. In the Jaakonlampi open pit, the blasting times are usually 13.45pm. The time of the blasting work is indicated with the flashing light.

In addition, the blasting timetables are informed in advance via pretermined email list. The blasting manager informs in the email the roads and areas to be isolated. Its not always possible to include all the functions and areas inside the risk area to the email. In the blasting info message, its also included that one shall stay inside during the blasting. The blasting manager is responsible about the area isolations and in unclear circumstances he/she must be contacted.

4.3.2 Area at risk of flying stones

The areas at risk of flying stones are defined in the following chapters.

4.3.2.1 Area at risk in the Särkijärvi open pit

During the blasting work, the following areas shall always be emptied from persons:

-Underground pump house
- Cold storage located in the end of drill warehouse
-The roads around the area that are closed
- The heap areas that are closed
- Crushed stone heaps and crushed stone

During the blastings, everyone shall be inside a building in the following areas, if its mentioned in the notification

-Spindle + electricity room next to the spindle
- Drill hall
- The alliance's garage/depot
- The alliance's cold storage + washing hall
-The alliance's office + parking lot
- Spindle warehouse (karasydänvarasto)

Staying inside a building doesn't automatically mean that you are in the area at risk, but it helps the work of the blasting guards at that moment. In addition, everyone working next to the previously listed buildings shall stop their work and go inside a building that is allowed to function as safety area.

During the blasting, the following areas shall be emptied from persons, if its mentioned in the blasting notification.

-Spindle (kara)
-Spindle warehouse (karasydänvarasto).

4.3.2.2 Area at risk in the Jaakonlampi open pit

During the blasting, the following areas shall be emptied from persons:

-Jaakonlampi open pit

-The roads around the area that are closed

-Raasio's pond with the areas that are closed

-Raasio's road with the areas that are closed

During the blasting, the following areas shall be emptied, if the blasting manager has determined so:

-Jaakonlampi/ the ice of Jaakonlampi.

4.3.3 The blast

Everyone working in the mining area is obliged to find out whether their work site is located in the area at risk of flying stones and rocks. This is also part of the work permit process. 15 minutes before the confirmed blasting time, the workers and site machinery must be outside the area at risk of flying rocks. Each contractor is responsible for ensuring that their equipment and staff are at a safe distance.

As the blasting draws near, the guards close down the roads to the area and inspect the blast area to ensure that it is empty. All orders given by blasting work guards must obeyed immediately.

Before the explosion, you will hear an intermittent whistle for 3 minutes, followed by a continuous whistle for 1 minute. If you at this time suspect that you are in the blast area, contact the foreman of the blasting work with your VHF phone via channel 7. Seek shelter immediately or leave the area. Staying indoors is always safer than outdoors. If you hear the whistle at the mine end, stay in the yard of the concentrating plant. Do not queue up at the mine gate.

4.3.4 Actions in the mine after the blast

The blasting manager determines, when it is safe to return to the mine again. It is forbidden to entry the area at risk before all the charges have been blasted or before 5 minutes from the blast have been passed. The charges which haven't been blasted should be removed immediately after the blasting. If its not possible to remove the the charges that haven't been blasted, the blasting manager shall give instructions about the estimated danger of the charges and about the prevention actions to the workers and others that are in the area at risk. Handling the charges that haven't been blasted have own standard operation procedure.

It is prevented to enter a closed space or another place, to which the blasting gases, which hare hazardous to health can accumulate, before it has been made sure by measuring or in another reliable way that the hazardous substance doesn't exist in the space anymore. If its noticed that the blasting gases move to a working area, the blasting manager shall keep that working area closed. If the blasting gases stay in the mine and they do not exit through wind or natural way, the following procedure shall be followed:

- The blasting manager keeps the mine closed from other traffic.
- If the person who have conducted the blast is still in the mine, he/she can be taken out.
- The person who conducted the blast shall be informed, so that he/she can go safe to the blasting container.
- The person conducting the blast shal have an exhaust hood integrated to the blasting device).
- When the blasting conductor has been taken out from the mine, a gas measurement is done to make sure the safety of the mine.
- The blasting manager is responsible of the gas measurement and organizing it, if he/she cannot conduct it him/herself. The blasting manager can name blasting planner/drill manager/shift manager of loading and transport to conduct the gas measurement, who has enough competence to conduct the measurement. There can be more than one persons to conduct the measurement if needed.
- The blasting manager defines boundary conditions, in which it is safe to return to the mine. The boundary conditions and gas measurement points are defined together with persons who are authorized for it.
- If the authorized person faces problems during the workshift, the first priority is to contact the blasting manager. If the blasting manager doesn't respond, the next priority is the foreman of blasting planners, manager of the mine, or a member of the safety organization.
- Work in the mine can be started, when the blasting gases are gone from the mine and based on the measurements it is safe to enter the mine.

4.4 Thunderstorms and charged fields

Thunderstorms may cause a risk of explosion at charged fields. For this reason, you should always leave the open pit during thunderstorm. You can monitor the progress of a frontal thunderstorm with thunder radars available on the Internet.

When the frontal thunderstorm is approaching the quarry, leave the blast area. Everyone working in the area is obliged to ensure that all persons working in the blast area are aware of the approaching frontal thunderstorm. In addition to this, the mine contractor shall issue a notification of the approaching frontal thunderstorm on channel 13 of the VHF phone. Once the thunderstorm has passed and it is safe to return to the pit, a separate notice will be issued in the same way as described above.

4.4.1 Safety of the dams

A dam break has been estimated to have the highest risk consequences in the mine functions. Dam safety shall be ensured in every part of the processes. The mine includes five dam areas: Musti's tailings sand pond, water pond, Raasio's tailings sand pond, Jaakonlampi and Sikopuro's pond. The dams of Musti's tailings sand pond, water pond and Raasio's tailings sand pond are class 1 dams (the highest risk class). The dams of Jaakonlampi and Sikopuro are class 3 dams.

In the mine area, also other water ponds exists, that do not have dams around them. These include eastern water pond, which relates to the drying of the mine, circulating water pond behind the enrichment plant, rainwater pond, in addition to ponds that collect water from the yard that are located between the mine's office and subcontracor's office buldings. The water ponds of the mine area have been described better in the figure 6.

Siilinjärvi's mine's process water system is based mostly to re-using the water that is circulating trough tailings sand's heap area. In addition, most of the mine area's ponds are part of the mine's internal processwater circulation.

If construction operations or mainentance operations are planned to the pond areas, the mine's civil manager shall be contacted about them to ensure a safe procedure.

Safety of the dams or the function of the water supply routes shall not be endangered in any part of the work. I you see a defect in a dam while working in the pond areas, follow the following alarm chain. In other situations that except from the normal circumstances, contact the enrichment plant's office or Yara's specialists. In figures 7 and 9, typical problem situations in dams are described.

Emergency instructions in case of a dam break at Yara Siilinjärvi
1. Alarming in an emergency **- Contact the enrichment plant's office 050-438 4146** **- If you cannot contact the office, call 112** **- Yara Siilinjärvi address: Nilsiäntie 501, Siilinjärvi** **- Tell, which of the dams has the damage (map in figure 6)** **- Establish a guidance to the damaged area**
2. In case its needed, warn the nearby workers and isolate the area from outsiders. **- If needed, give a common notification to through the VHF phone in channel 13.**

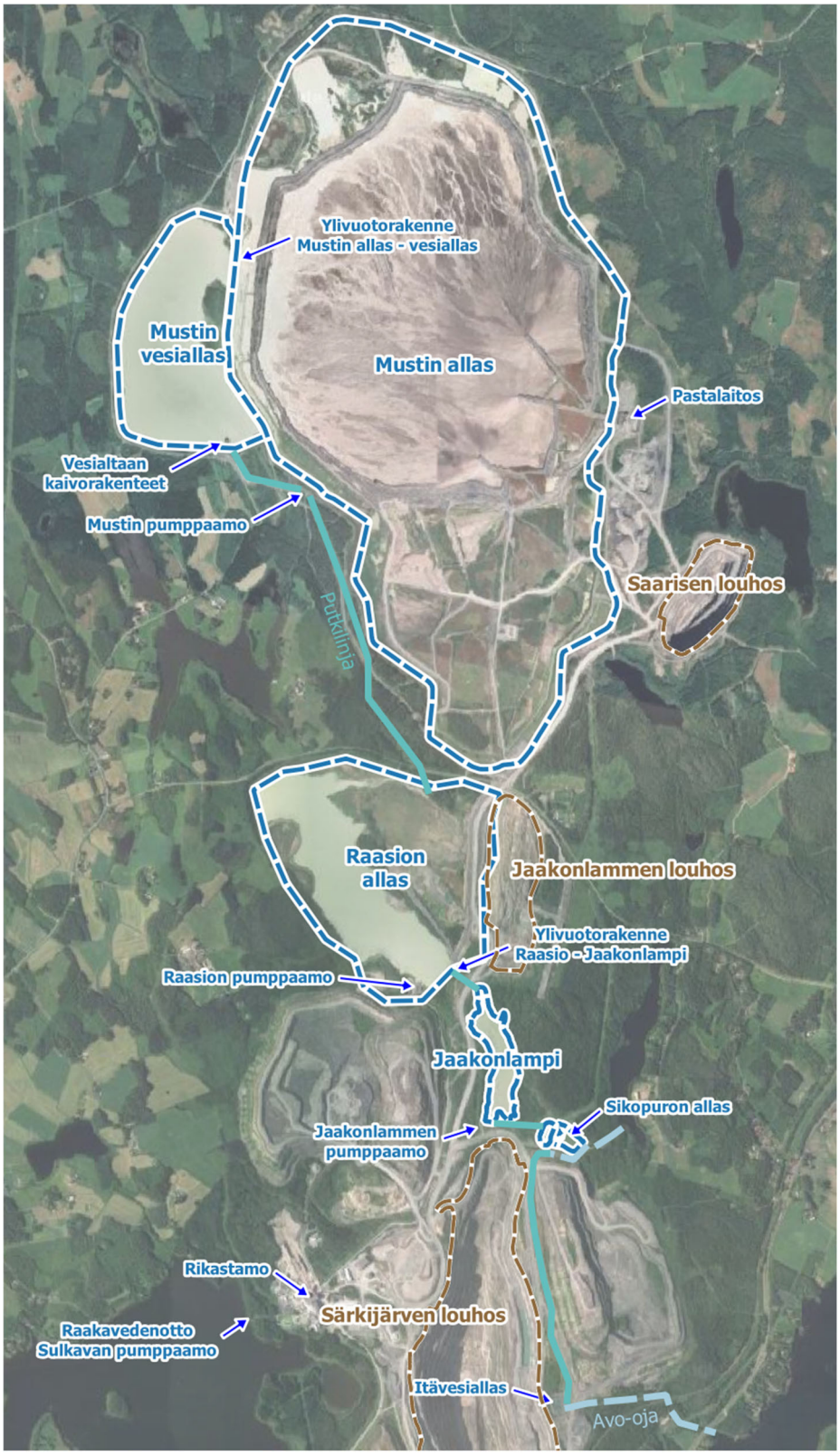

Figure 6. Mine's dam and water pond areas.

Figure 7. Dam overflow. Contact immediately Yara's specialists depending on the size of the flow or follow the emergency instructions.

Figure 8. Dam overflow. Contact immediately Yara's specialists depending on the size of the flow or follow the emergency instructions.

Figure 9. In the figure, there's lots of dust in the mine area's air. In this situation, Yara's specialists need to be informed to start the dust preventive actions.

5 Environmental safety

Each person working in the area shall minimize his/her own environmental impact. The environmental impacts include noise, dust, waste and pollution of soil and waters.

If you do noisy work, such as crushing, noisy work in high altitude or machinery work in the periphery of the mine, make sure the right working times and noise limits from the personnel of the mine.

Dust can occur from road network, water areas and heap areas. In low temperature winterdays, in addition to hot and dry summerdays, the dust can spread along the wind to large areas to the environment. Make sure that you don't cause extra dust through your activity. If necessary, ask additional instructions from the personnel of the mine.

Make sure you take care of the waste management according to Yara's instructions. Note the extra pollutions caused by the mishandled waste. Make sure that the soil stays clean in the work location. If oil leak occurs, saturate the oil from the soil and return the oily substance to a permissible waste return point. Prevent the oil from draining into waters for example with an oil boom. In case of large oil leakage, restrict the leakage and contact the fire department of the factory. Inform the personnel about each oil accident.

6 Visitors in the mining area

This chapter describes the issues that must be taken into account when taking visitors to the mining area. Otherwise you should observe the general visiting instructions for the Siilinjärvi site. The hosts of the visit and those guiding the visitors at the mine site are responsible for ensuring the safety of the visitors and compliance with these instructions.

Visitors may only move around the factory and mining areas when guided by their host. If a subcontractor has a need to bring visitors to the company sites, they must acquire permission from the orderer. These visitor instructions apply also to the staff and visitors of the contractors operating in the area.

This chapter includes instructions for visiting the mining area of Siilinjärvi site. Also certain specifications are included in chapters 6.1 and 6.2.

6.1 Visits to the vantage point over the open pit

An electric gate has been installed for the vantage point, which prevents outsiders to enter the area. Its possible to visit the vantage point with a person who is allowed to enter the area. During the day when the blasting is done, the gate is closed 15-30min before the blasting and its opened after it. During the blasting its forbidden to enter the vantage point.

Personal protective equipment is not required for visits to the vantage point. When visiting the vantage point marked on the map in a vehicle, no special equipment is needed.

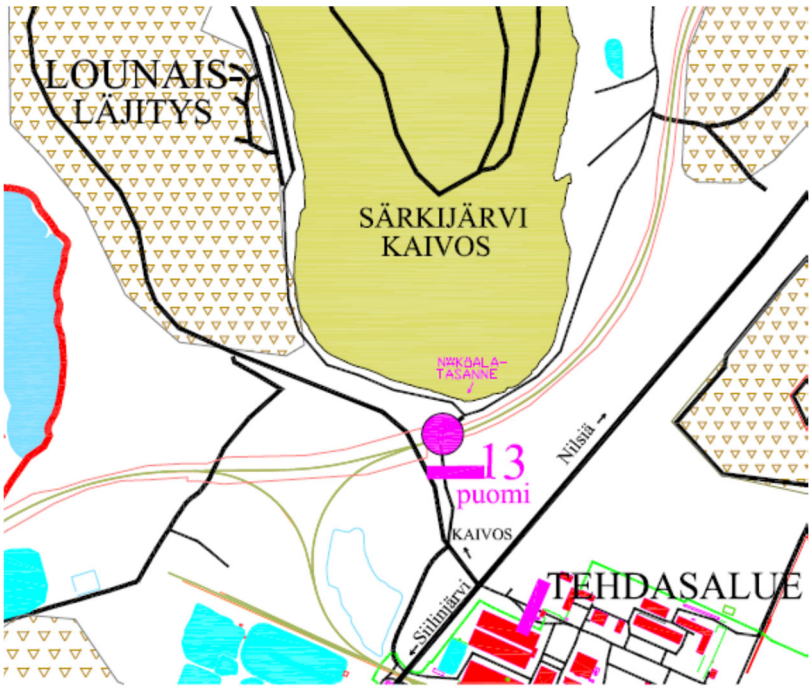

Figure 10. The vantage point at the southern end of the Särkijärvi open pit.

6.2 Visits elsewhere in the mining area

Those who are not mine staff must always request permission for a visit to the mining area or when bringing visitors to the mining area. Mine staff who are familiar with the conditions of the mining area and able to arrange a competent guide, if needed, for the visit may grant such permissions.

If the visitors enter the mine site with their own car, their host must go through the instructions indicated above with the driver. In addition to this, if necessary, a representative of Yara must be present in the vehicle, or the visitors must drive as a convoy with Yara’s representative driving the first car.

7 Attachments

7.1 Shelters in the plant area

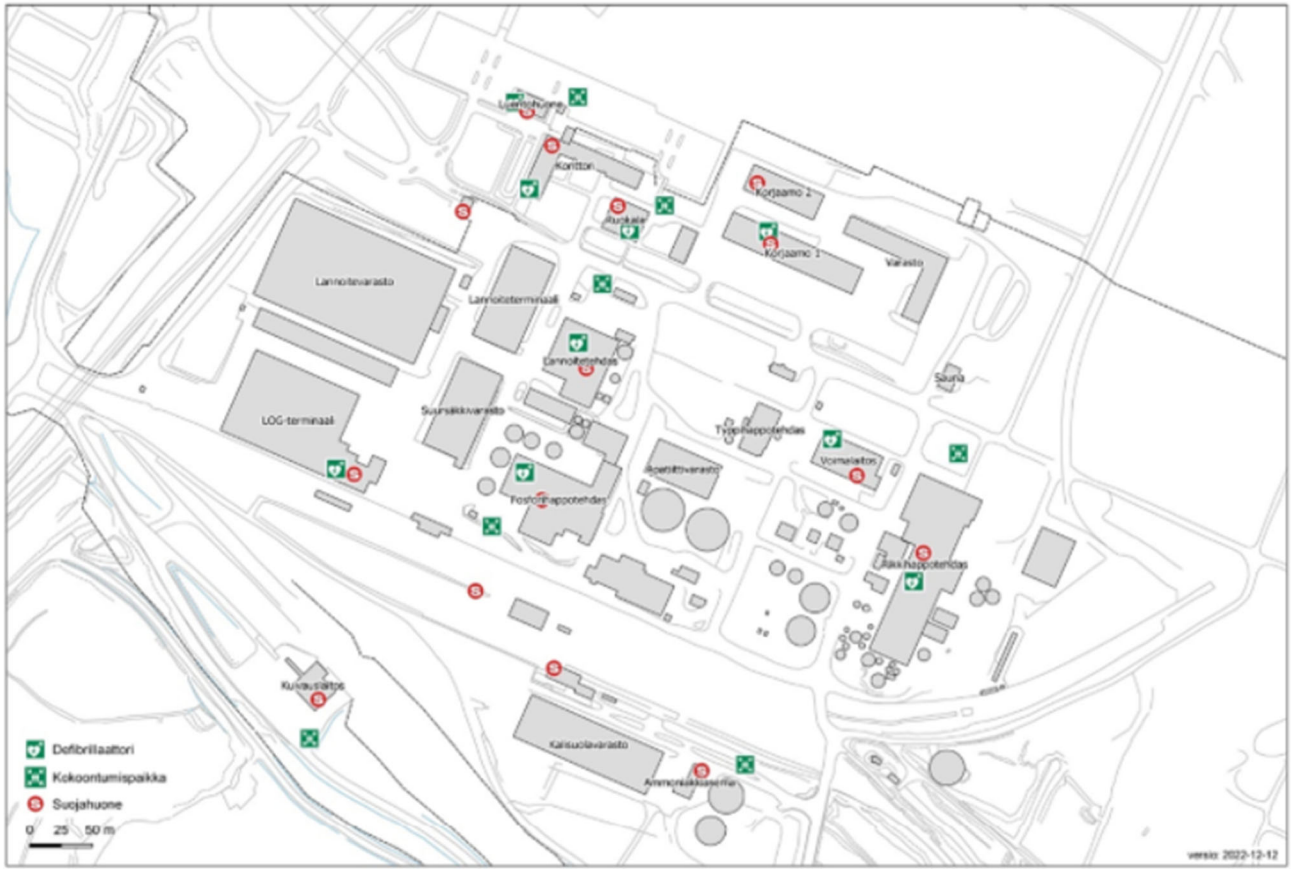

Image 3. Shelter rooms, assembly places and defibrillators in the factory area.

7.2 Gathering points and defibrillators in the plant area

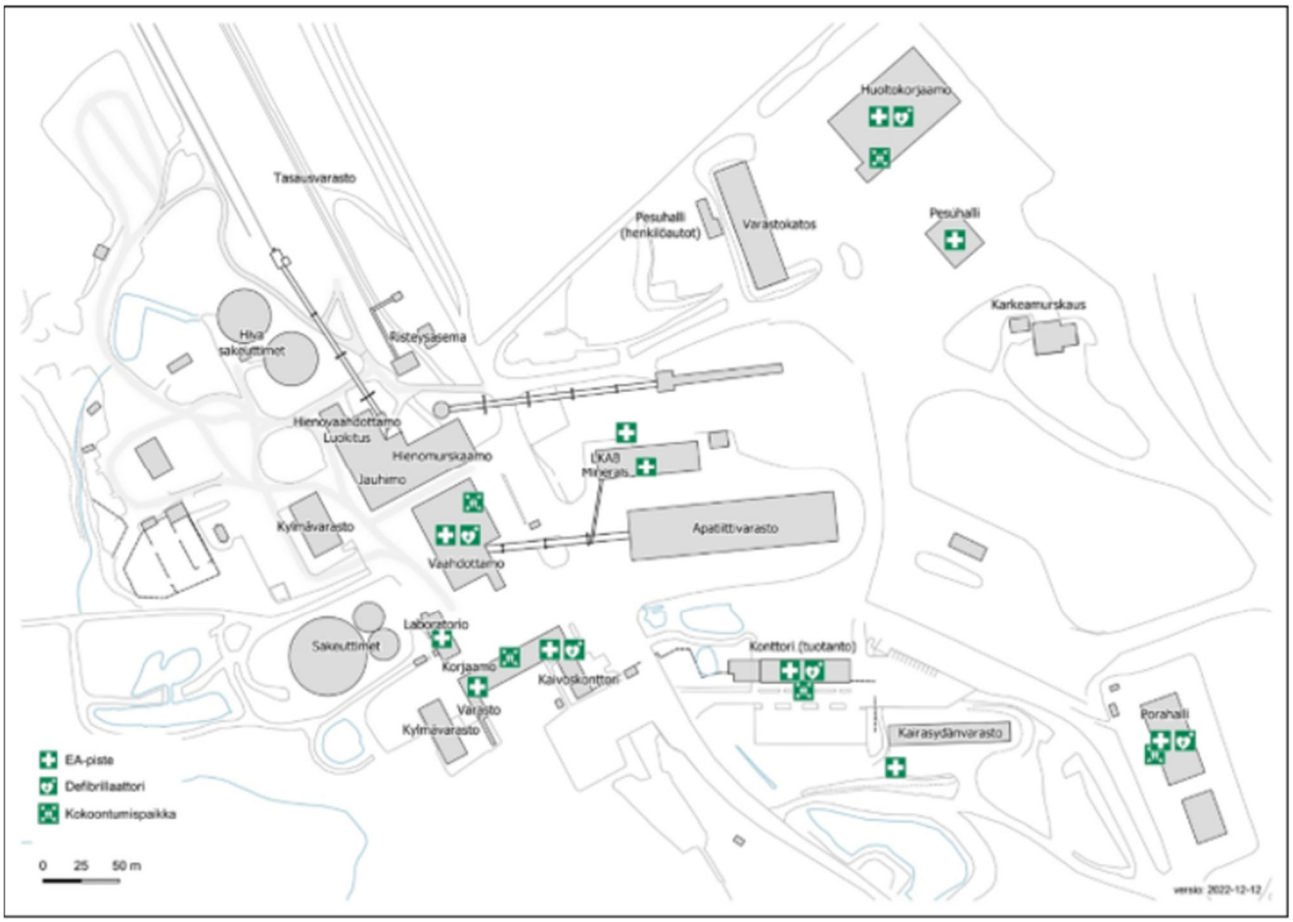

Image 4. Shelter rooms, assembly places and defibrillators in the mining area.

7.3 The risks of major accidents, gases that may occur, and the most dangerous chemicals in the area

The risks of major accidents at the site include:

Fertiliser fire: gas cloud

- **At the fertiliser storage area or factory**
- **In materials handling or aboard a ship.**

Ammonia leak: gas cloud

- **Unloading of railway cars, placing in storage**
- **Factory processes**

Sulfur dioxide leak: gas cloud

- **Breaking down of a process gas line**

Environmental damage

- **Dam accident**
- **Fire extinguishing water**

The following gases may occur in the area:

- **Ammonia**
- **Sulfur dioxide**
- **Sulfur trioxide**
- **Nitrogen oxides**
- **Fluoride gases**
- **Hydrogen sulfide**
- **Chlorine**

The most common dangerous chemicals at the site are:

- **Ammonia**
- **Nitric acid and nitrogen oxides**
- **Ammonium nitrate**
- **Sulfuric acid and sulfuric trioxide**
- **Sulfur dioxide**
- **Hydrogen sulfide**
- **Peracetic acid**
- **Chlorine**
- **Phosphoric acid**
- **Hexafluorosilicic acid**
- **Lye / sodium hydroxide**
- **Calcium hydroxide**
- **Sodium hydrogen sulfide**

7.4 Department-specific induction at the site

Department-specific induction at the site	
Everyone working at site shall have an occupationa safety card, 8h training. Approved cards are TTK, Trinno and verkkokoulu.com. • **Before starting work, a procedure-specific induction must be performed for each procedure.** **FHT = phosphoric acid factory** **Includes: gypsum pile** **LAT = fertiliser factory** **RET = sulfuric acid and energy production** **Includes = power plant, ammonia station, calcine pile** **LOG = logistics** **Includes = packaging section, harbour, railway yard, storage, apatite kiln plant** **APT = mine** **Includes = open pit, concentrating plant, Yarex, E. Hartikainen, paste plant and traffic in the mining area.** **Inductions are valid for one year.** **If a vehicle is needed to work in the area, a separate vehicle permit must be applied for.** **As of 1.1.2024, vehicle permit applications will be submitted in Zeron. Only an approved application entitles you to a vehicle in the area. Short vehicle permits are also applied for at Zeron.**	 **Induction by procedure from the video in Prewise.** **Duration approximately 15 minutes per video.**

7.5 Inspections of power tools

Inspections of power tools

Power tools and extension chords need to be inspected by an electrician in every 12 months.
Inspection mark needs to be put in the end of the cable as in the figure.

Marking to inspection protocol and documentation.

Vuosi	Tarkastusväri
2022	Vihreä
2023	Oranssi
2024	Sininen
2025	Keltainen
2026	Valkoinen

1. **category company = exists at the site all the time**
2. **category company = regular supplier > 10x per year**
3. **category company = one time supplier < 10 days per year**

1. **category companies pays the inspections themselves.**
   In case of projects, the inspection requirements are involved in the contracts.

   Yara is paying the inspections for 2. and 3. category companies.

   Sanctions from abandoned tools: 100€/tool, which can easily be avoided by a visual inspection:

   -Broken plugs and extension sockets
   -Broken chassis of a power tool
   -Clear damage in a connection cable
   -Flap missing from an extension socket
   -Or any other clearly visible fault

7.6 Requirements of safety footwear and helmets used in Yara Siilinjärvi

Requirements of safety footwear and helmets used in Yara Siilinjärvi
High-top shoes that support the ankle according to S3 and S7 standards need to be used in the factory and mine area.  **Chin strap in the helmet is mandatory from April 1 2024.**  **In welding, a welding mask with helmet is mandatory. Only through separate risk assessment an exception can be allowed.**

7.7 Suitable workwear according to following standards

Suitable workwear according to following standards
ISO 20471 standard is defining the color and reflector requirements of the workwear. **The workwear shall consist of long sleeved jacket and long-legged pants.** **The workwear shall include the name of the employer and the employee.**
In addition:
Workwear according to ISO11611 shall be used in welding work. **Workwear according to SFS-EN ISO 11612 standard class A1 B1 C1, EN 61482-1-2 (class 1) shall be used in electric automation work.**

7.8 Inspections of lifting devices and lifting aids.

Inspections of lifting devices and lifting aids.

Lifting devices and lifting aids shall be inspected and maintained yearly.

Small lifting slings (päällysteraksit ja nostovyöt) (0,5-5 tons) that are in use in Yara's area:

-Date of starting the use shall be marked behind the label in accuracy of month and year. For example, 1/2024.

-Are deleted from use latest after one year from the date of starting the use. For example, if date of starting the use is 1/2024, the latest date in use is in the end of January of 2025.

Vuosi	Tarkastusväri
2022	Vihreä
2023	Oranssi
2024	Sininen
2025	Keltainen
2026	Valkoinen

Rev 1. 19.6.2024	Structure modification TLa
Rev 2. 20.6.2024	Power tools, safety workwear, environmental safety TLa
Rev 3. 24.6.2024	3.4.1-3.4.9 TLa
Rev 4. 25.6.2024	Blasting safety, safety of the dams TLa
Rev 5. 26.6.2024	Inspections of lifting devices and lifting aids, visitors in the mining area TLa