

Annual Maintenance 2023

Information for persons working
on the annual maintenance

Right to changes is reserved. Please follow: <http://www.suurteollisuuspuisto.com/extranet/vuosihuolto-nornick-el/> for the latest information.



4 + 1 GOLDEN RULES OF SAFETY



By following the four golden rules and by intervening in risk situations you can ensure the safety of yourself and your colleagues.

4 + 1 = 0

[GOLDEN RULES]

[ACCIDENTS]



NORNICKEL

HARJAVALTA

Remember before the annual maintenance

Check the validity of your safety trainings

- ⇒ General Safety Induction on the Suurteollisuuspuisto Industrial Park (koulutus.suurteollisuuspuisto.com)
- ⇒ Nornickel Safety orientation
- ⇒ Nornickel annual maintenance orientation (koulutus.nornickel.fi)

Valid safety certificates?

- ⇒ VALTTIKORTTI, with RFID-identification
- ⇒ OCCUPATIONAL SAFETY CARD, Center of Occupational Safety (TTK)

All persons working on the site must have a valid Occupational Safety Card from Center of Occupational Safety (TTK). Keep the Safety Card with you when staying in the factory area.



REGISTER yourself at the checkpoint at the Länsitie gate before entering the site.

Checkpoint by Länsitie gate will be opened on 8.5.2023 and it will be open daily:

during 7-15 (lunchbreak 11.45-12.15).



Bring along a personal lock needed for energy isolation.

Bring a padlock for the locker room cabinet.

Welcome to Nornickel annual maintenance

Nornickel Harjavalta's (NNH) annual maintenance will be done 22.5.-9.6.2023 and the site is classified as a construction site in accordance with the Decree on the Safety of Construction Work (205/2009).

Registration **at the checkpoint at the Länsitie gate before entering the site is mandatory for everyone.** Driving and access permits as well as tax information will be checked at the checkpoint.

All persons working on the annual maintenance must perform the General Safety Induction of the Suurteollisuuspuisto Industrial Park, Nornickel Safety orientation and Nornickel Annual Maintenance orientation.

Trainings shall be performed online:

koulutus.suurteollisuuspuisto.com (General Safety Induction of the Suurteollisuuspuisto Industrial Park) and **koulutus.nornickel.fi** (Nornickel Safety orientation and Nornickel Annual Maintenance orientation).

The Nornickel Annual Maintenance orientation will be published on **2.5.2023. Please perform the online orientations at least two working days before arriving to the site.**

All persons working on the annual maintenance site must keep the Valtticard with tax information visible at all times. They also have to punch in using the Valtticard when entering and exiting the site every day. The punch in devices are located by the turnpikes and by the main entrance of all production departments.

Annual maintenance organization



The person responsible for the developer:
Mikko Luoma
050 438 5608



Annual maintenance official:
Juuso Lindqvist
050 540 9791



Safety coordinator
Toivo Nieminen
040 183 6391



Safety Manager:
Iiris Paavisto
050 540 6927



Electrolysis plant safety contact person:
Mikko Seilo
050 384 3658



Leaching plant safety contact person:
Minna Venho
050 374 4906



Reduction plant safety contact person:
Virpi Heikkinen
050 384 3661



Chemical plant safety contact person:
Janne Lahtinen
050 438 4101



Safety representative:
Sami Mäkilä
050 596 9369

Safe annual maintenance is the goal

NNH's goal is to perform a safe annual maintenance, without accidents, fires or environmental damages. This requires everyone's involvement: the use of PPE and following the regulation, risk assessment before starting the work and risk case observations and reporting.

Safe annual maintenance, without accidents, is the goal

If you notice safety related deviations, inform the work supervisor immediately.

Work permits

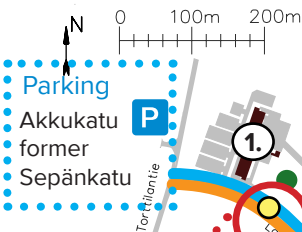
Work performed by external operators within the production facilities always requires a written work permit. Hot work, tank work, chemical piping work, and fire and extinguishing system work always require a work permit for everyone. The work permit is valid for one day and must be returned when the day ends. Returning the permit is mandatory because on emergencies the person list is printed from the work permit system.

Join the information channel

Send an SMS "VH NNH LIITY" to 18200.

You can leave the information channel by sending a text message "VH NNH EROA" to 18200.

The channel is used for alarm and information communication during the annual maintenance.



Before the Länsitie gate

Access and driving permits and checking tax information

Länsitie gate

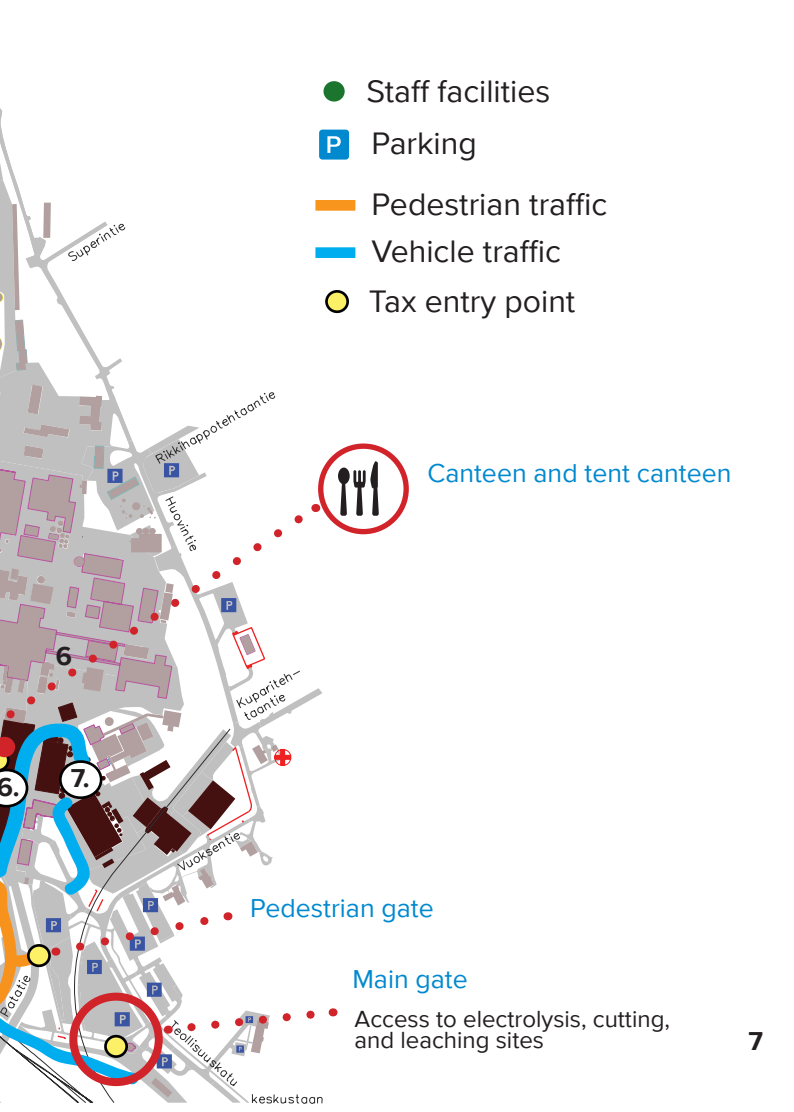
Access to the chemical factory and reduction sites

● Work permits

1. Nornickel office
2. Chemical plant, 3rd floor
3. Main warehouse
4. Reduction Plant
5. Cutting Plant
6. Electrolysis and leaching work permits
7. Leaching plants



Tent canteen



● Staff facilities

■ P Parking

— Pedestrian traffic

— Vehicle traffic

● Tax entry point



Canteen and tent canteen

Pedestrian gate

Main gate

Access to electrolysis, cutting, and leaching sites

Personal Protective Equipment

Before starting work, make sure you know which protective equipment to use on the site. The basic equipment for personal protection when working in production facilities is:

- Long-sleeved and long-legged workwear (coat and trousers)
- Safety shoes with shaft and gloves
- Helmet with a chin strap
- Eye protection



- Respirator (if necessary, depending on the area FFP3 or ABEK P3)
- Ear protection
- High-visibility clothing (a high-visibility vest or coat in accordance with the EN-ISO-20471 standard)

Occupational Hygiene

The raw materials, chemicals and products used in Nornickel's processes include agents posing a risk for cancer diseases, such as nickel. Chemical agents may enter your system through the airways, mouth, or skin.

It is essential to take care of good occupational hygiene when working on

Nornickel premises.

Nornickel has reserved temporary social premises for contractors. Social premises are located next to the chemical plant and reduction plant.

Each contractor can take two lockers to the use: one for clean clothing and

the other for dirty work clothes. Contractor shall bring their own padlock for the lockers.

It is important to change clean clothes always when leaving the factory area!

Avoid exposure:

- Use protective equipment
 - In clean facilities, use shoe covers and leave the dirty jacket a rack when possible
 - Wash your hands and face when you exit the production facilities and before eating or smoking
 - Dining in dirty clothes is not allowed.
 - Wash yourself when your working day ends
 - Don't expose others!
- Do not transfer nickel dust on your dirty clothes or shoes to your vehicle or home.

If you are allergic to nickel or are pregnant, ask your supervisor or occupational health-care whether you can work in the area.

Order and tidiness

It is everyone's responsibility to ensure the cleanliness and order of their work site and storage areas. Hoses and power cables must be installed in a way that they will not cause tripping hazards on walkways. Especially note cable installations between doors and their frames in order to prevent wear and damages. After finishing the work, the contractor shall remove all equipment and materials, waste, temporary structures and scaffolding from the work site. **If the contractor neglects the cleanliness of the working environment, the host organization will order cleaning for the site at the contractor's expense.**

Energy isolation

The aim of energy isolation is to prevent accidental start-ups of machinery. The de-energization of machines must be ensured before any service, maintenance, or other operations on the machinery. De-energization is ensured with a lock and by trial-starting the machines before starting work. NNH is responsible for the de-energization of machinery. Service providers (partners and contractors) will also use their own locks on sites.



The service provider locks must be marked in such a way that they show the company attaching the lock, and the name and phone number of the person attaching the lock.

ATEX orientation

ATEX safety orientation is required from everyone working in ATEX classified spaces. ATEX space is a space where a possibly explosive atmosphere might occur. Work permit will not be granted if the person's ATEX qualification cannot be verified.

Hot work guarding



Hot work guarding required by the hot work permit must continue seamlessly during the actual hot work phase and breaks, and as post-work guarding.

The hot worker and hot work guard must have a valid hot work card, and they must know the hazards related to hot work and be able to place an emergency call and use the first-aid extinguishing equipment provided on the hot work site. The hot work performer may not act as the hot work guard during the work.

The length of post-work guarding will be defined when granting the hot work permit, based on hazard report and assessment. Continuous hot work guarding must always be continued for at least one hour after the actual hot work has ended.

Vehicle traffic

In the Suurteollisuuspuisto Industrial Park area, we follow the Road Traffic Act, and entering is always subject to authorization. It is prohibited to bring any unauthorized persons to the factory area. When driving through gates, only the driver may stay in the vehicle. Parking is only allowed on the marked parking lots. Vehicles are only used for bringing materials and tools to the working site and back. Any other driving is prohibited, and speed limits must be obeyed! The speed limit is 30 KPH unless otherwise stated.

All person applying a driving permit must first perform A safety orientation for drivers online: koulutus.suurteollisuuspuisto.com



For more information on sorting: L&T waste management personnel, tel. +358 50 385 6401

Waste management and environment

Waste is sorted on the site where waste is produced in accordance with valid sorting guidelines. Ask for the locations of dumpsters and waste containers on your working site from your superior or work supervisor. If you need extra waste containers, contact your superior, supervisor, or the NNH personnel.



The work must not cause any hazardous noise or dust to the environment. Report any environmental hazards or threats immediately to the customer company's supervisor, your own superior, or NNH personnel, and take immediate action in order to prevent and restrict hazardous materials from contaminating the environment, taking into account your own health and safety as well as that of others.

In an emergency

Gas danger

The general warning signal indicates a direct hazard threatening people. In case of an accident, everyone must follow the instructions provided by the rescue personnel.

When you hear the general warning signal, go to the nearest shelter and follow instructions. Avoid using your phone in order to prevent the lines from clogging. The “danger over” signal is a one-minute, continuous sound signal. It indicates that the threat or danger is over.

Fire

When you hear the fire alarm, exit the building immediately and go to the assembly point outside the building.

In an emergency, call 112.

Also notify the main gate immediately about the emergency call (+358 2 5358 112).