

# Practical info for contractors during SD

Lillo Site (2023)



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- Site overview
- Alarm
- Hazards
- Obligations during your work
- Contact persons



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Site overview

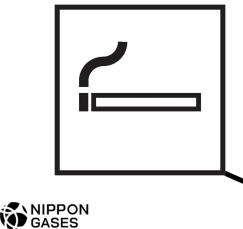


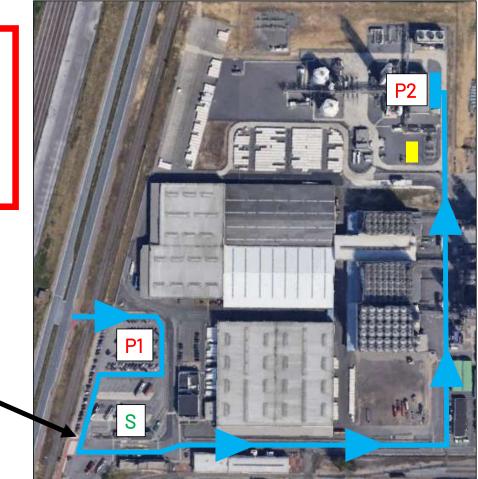
#### Site overview : entrance lneos => site NG

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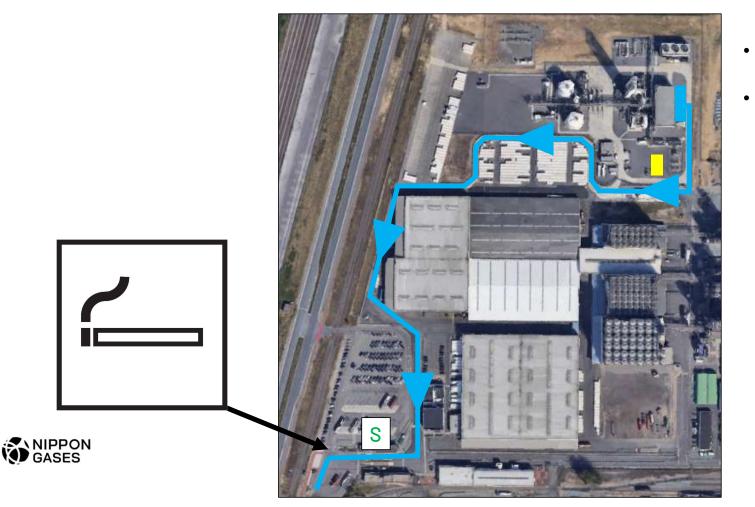






- First park at parking(P1)
- Then go to security(S)
- You will receive a badge
- Drive on to our site and park at parking (P2)

#### Site overview : site NG => exit lneos



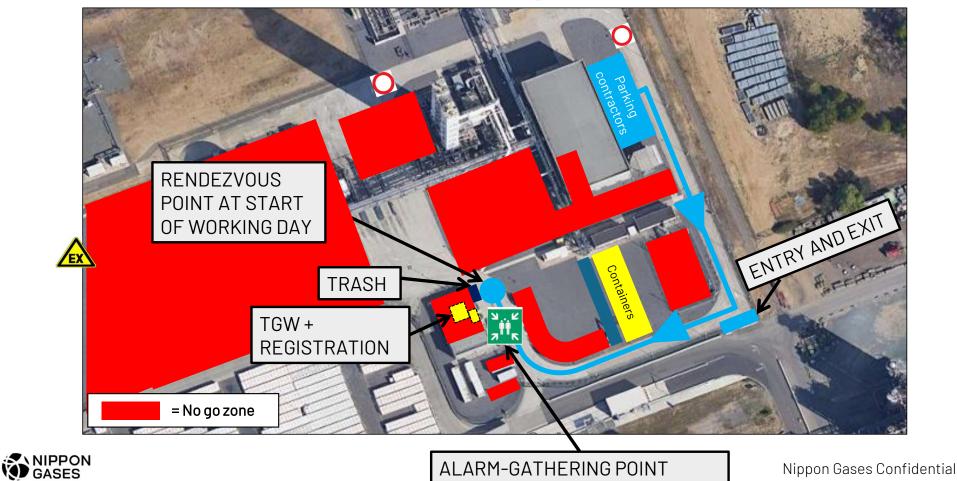
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- Leaving the site by inserting your badge at security(S)
- Badge for multiple days is spit right back out

#### Site overview : rendezvous point

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## Site overview : safety

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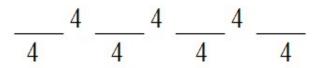


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Alarm

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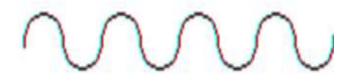


- Interrupted signal 4 sec on / 4 sec off:
  - Stop all work immediately.
  - Flashing lights and audible intermittent signal at loading bays.
  - Go to the designated assembly point:
  - Take your work permit with you on site.
  - o Contractors and NG personnel wait here for further instructions from Ineos



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## **Evacuation alarm**



- Wave signal:
  - Follow the instructions of the evacuation leader, NEVER leave the site on your own initiative.
  - Make your way to the rendezvous point at lneos, indicated by a pictogram at gate 1.
  - Do not forget your **Ineos badge** to be able to exit.
  - $\circ~$  Follow the instructions of the lneos evacuation leader.



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#### End of alarm

- Continuous signal :
  - Return to the NG site where you can resume work after requesting a work permit.
  - If the calamity occurred on the NG site, a return can only be possible if it was released after consultation with the internal / external emergency service (TIP or external fire brigade) and in consultation with crisis management.



# Sounding the alarm yourself in emergencies

- Via the alarm indicator on the front wall next to the entrance door (see photo)
- Depending on the emergency alarm, directly to Ineos or CR Zwijndrecht (see photo)
- Via personnel present of NG



PORS

TUV

WXYZ

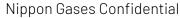


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# Flaring of ethylene and propylene at emergency shutdown INEOS

- Sudden emergency shutdown of Ineos plant leads to complete flaring of ethylene and propylene
- This produces a large intense flame and a lot of black smoke at the flare plant.
- However, no reason to panic, our local operations can continue normally







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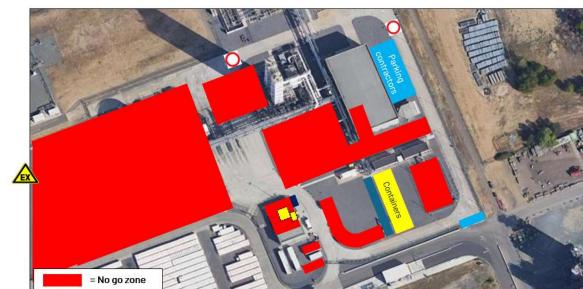
# Hazards



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## Hazards:

- Additional hazards from other work:
  - Crane work: do not walk under suspended load / object
  - o Stay at sufficient distance from cold box (largest tower), risk of falling components
  - $\,\circ\,$  Cleaning of aftercooler by Romarco





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# Obligations during your work



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## **Obligations during your work**

- Write down your name and time on the registration document: (at location for TGW)

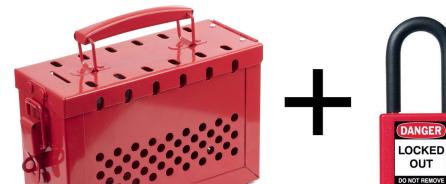
   Every day when arriving and leaving the plant
  - Used during emergencies as a check that everyone is at the assembly point
- TGW (Toelating Gevaarlijk Werk) = work permit:
  - $\,\circ\,$  Must always be present at the workplace
  - $\circ~$  Do not start work without TGW
  - $\circ\,$  Return TGW at the end of the working day



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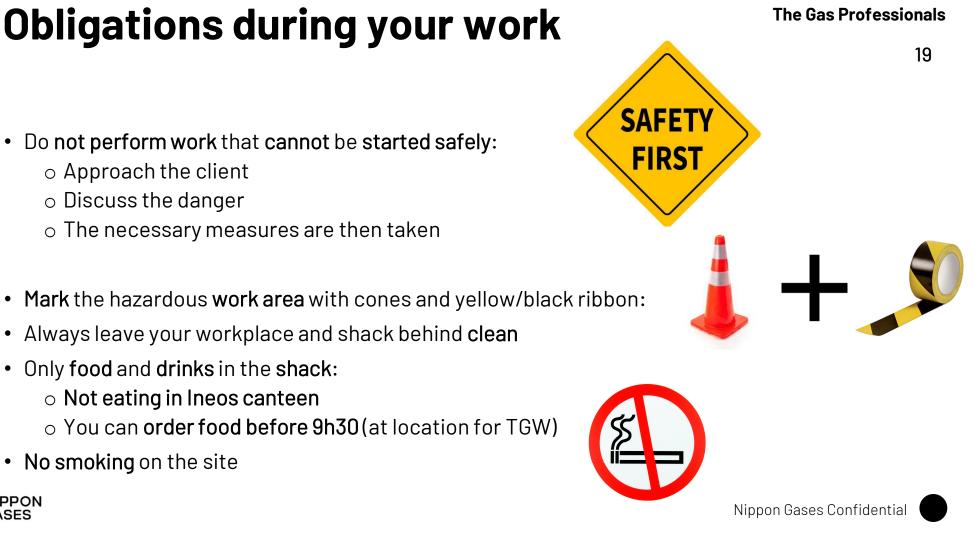
**Obligations during your work** 

- LOTO BOX: (at location for TGW)
  - o Crew leader must have a lock with one key and attach it to the LOTO BOX
  - $\,\circ\,$  Place and remove this lock at the start and end of work each day



ABUS





- Do not perform work that cannot be started safely:
  - Approach the client
  - Discuss the danger
  - The necessary measures are then taken
- Mark the hazardous work area with cones and yellow/black ribbon:
- Always leave your workplace and shack behind clean •
- Only food and drinks in the shack:
  - Not eating in Ineos canteen
  - You can order food before 9h30 (at location for TGW)
- No smoking on the site



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# **Obligations during your work**

• When **using** the **workshop after permission** by an **NG employee**, you should always wear safety shoes, safety helmet and safety glasses.

ANIPPON GASES







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# **Obligations during your work**

- Samenvatting:
  - $\circ$  Registration
  - $\circ \, \mathrm{TGW}$
  - $\circ$  LOTO + lock
  - $\,\circ\,$  Do not perform work that cannot be started safely
  - $\,\circ\,$  Mark the hazardous work area with cones and yellow/black ribbon
  - $\,\circ\,$  Always leave your workplace and shack behind clean
  - $\,\circ\,$  Only food and drinks in the shack
  - $\,\circ\,$  No smoking on the site
  - $\circ$  PPE mandatory in building workshop (subject to permission)





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# **Contact persons**



#### Contactpersonen

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#### • Safety:

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  - o marino.waem@nippongases.com





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additional information



## Hazards: explosion

- At natural gas stations, potentially flammable atmospheres can arise due to the accidental release of natural gas.
- Therefore, an EX zone has been defined.
- Gas detectors or LEL measurements are installed in the EX zone.
- MEASUREMENT
  - Do not enter EX zone with electrical appliances or mobile phones.
  - $\,\circ\,$  Indicated on site with pictograms.







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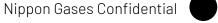


## Hazards: noise by end of SD

- At several places in the plant, we have to deal with harmful noise levels (>90dB):
  - $\circ$  Prepurifiers
  - $\circ$  Booster / turbine
  - o Compressor building
  - 0 ...
- Maatregelen
  - $\circ$  Wear hearing protection in areas marked with corresponding pictogram.
  - $_{\odot}$  Wear hearing protection when you need to perform work with noise-producing tools.
  - For prolonged work (> 30 min) in the compressor building, it is mandatory to wear double hearing protection (earplugs + earmuffs mounted on helmet).







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