



CSP/PB

# Site Rules

Chemelot

## Contents

### **1. General**

- 1.1 Starting points of Site Rules
- 1.2 Structure of Site Rules
- 1.3 Legislation and regulations
- 1.4 Implementation, follow-up and audits
- 1.5 Site Rules management cycle
- 1.6 Regulations compliance policy
- 1.7 Communication
- 1.8 Exemptions
- 1.9 Management of Site Rules

### **2. Notifications**

- 2.1 Reporting and registering abnormal occurrences pursuant to the Environmental Management Act / Decree on Major Accidents Hazards / Water Act
- 2.2 Reporting other occurrences (overview)

### **3. Soil and site planning**

- 3.1 Soil contamination or deterioration
- 3.2 Soil investigation prior to construction, excavation and demolition activities
- 3.3 Site planning approval

### **4. Infrastructure**

- 4.1 SiteView for OBL pipes and OBL cables
- 4.2 Modifications impacting OBL provisions
- 4.3 Accessibility of roads and site areas
- 4.4 Installation and removal of temporary accommodation OBL
- 4.5 Signage and route diversions OBL
- 4.6 Provision of greenery, weed control, pest control
- 4.7 Pipe ways/pipe racks
- 4.8 Excavation and earth-moving works

### **5. Safety, Health, Environment (SHE)**

- 5.1 SHE care
- 5.2 Registration of accidents and environmental incidents at site level
- 5.3 Training and instruction
- 5.4 Working conditions
- 5.5 Work permits
- 5.6 LMRA
- 5.7 Electrical safety
- 5.8 Contractor safety

Contents

General

Notifications

Soil and site  
planning

Infrastructure

SHE

Permits  
(government-  
tal)

Security

Emergencies

Shutdown and  
start-up  
programmes



5.9	Transport safety	
	A. Road transport	
	B. Rail transport	
5.10	Utilities	
5.11	Alcohol and drugs	
5.12	Use of mobile telephone	
5.13	Use of tablet/laptop in a plant environment	
5.14	Frequencies available for wireless communication by means of transmission equipment	
5.15	Scaffolding	
5.16	Transport Committee	
5.17	LoToTo	
5.18	Maximum ground pressure	
5.19	Traffic Act	
5.20	Housing Rules	
5.21	Assessing environmental risks in safety studies	
5.22	Safety Fundamentals Process	
5.23	Process Safety Plan	
5.24	Smoking policy	
<b>6.</b>	<b>Permits (governmental)</b>	
6.1	General	
6.2.	All-in-one Permit for Physical Aspects Chemelot Site	
6.3.	Greenhouse gases emission permit	
6.4.	Complex permit Nuclear Energy Act	
6.5	Waste water discharge permit	
6.6	Soil cleanup action plan for DSM, Geleen and Stein	
6.7	Groundwater extraction permit	
6.8	Nature Conservancy Permit	
<b>7.</b>	<b>Security</b>	
7.1	General	
7.2	Access rules for persons	
7.3	Access rules for vehicles	
7.4	Supply and removal of goods	
7.5	Searches	
7.6	Filming and photography	
7.7	Police involvement	
7.8	Investigating officers and government officials	
<b>8.</b>	<b>Emergencies</b>	
8.1	General	
8.2	Set-up of the Company Emergency Response Organization	
8.3	Company Contingency Plan document	
8.4	Regulations, Instructions and Best Practices	
8.5	Supplement to the documents	
<b>9.</b>	<b>Shutdown and start-up programmes</b>	
9.1	Utility failures	
9.2	Disruption of IAZI operation or on-site emergency involving a threat of the permit standards being exceeded	

**Appendices:**

1. Abbreviations
2. Overview of REGULATIONS and other mandatory documents
3. Overview of BEST PRACTICES



Contents
General
Notifications
Soil and site planning
Infrastructure
SHE
Permits (governmental)
Security
Emergencies
Shutdown and start-up programmes

## 1. GENERAL

### 1.1 Starting points of Site Rules

The Site Rules apply to all site users, other site occupants and external companies carrying out activities on the Chemelot site (including the IAZI wastewater treatment plant and the Stein harbour), in so far as they are of relevance to their activities.

Every site user must check what parts of the Site Rules apply to its activities and ensure that its staff and the staff of external companies carrying out work on its behalf are familiar with and comply with the relevant parts of the Site Rules.

The geographical boundaries of the Chemelot Site are defined in the site's permit under the Environmental Management Act, reference 2005/5, dated 14 June 2005.

The Site Rules form part of the Chemelot Site Management System, which is made up of:

1. Chemelot Site management model (defining the frameworks)
2. Definitions and abbreviations
3. Guide
4. Handbooks
  - 4.1. Chemelot Site Permit B.V. (CSP B.V.)
  - 4.2. Policy Board / Operational Board
  - 4.3. DSM NL B.V.
  - 4.4. Sitech Services B.V.
  - 4.5. USG
5. Site Rules
6. Agreements and other documents

Additional rules and regulations issued by individual site users can only supplement the Site Rules.

### 1.2 Structure of Site Rules

The fundamental requirement is for compliance with legislation and regulations, the Site Rules applying as a supplement to these. They comprise uniform rules and regulations for the entire site. Uniformity in the regulations applying on the site can be deemed necessary / desirable for the following reasons:

- consistency of regulations for all site users (based on the principle of equality of all site users)
- prevention of undesirable consequences for site users
- prevention of an increased risk of serious mistakes by contractors
- utilization of potential synergies (in so far as desired by site users)
- prevention of problems relating to access to or staying/working on the site
- compliance with a collective working practice imposed by the authorities.

In principle the Site Rules describe the ends to be achieved; the means by which these ends are to be achieved must be defined in supplementary regulations of individual site users.

#### Primary site users

A number of the SHE rules presented in [Chapter 5](#) apply only to primary site users. These are denoted by adding "Primary site users" in the heading of the relevant section.

#### Best Practices

Besides the Site Rules a number of best practices are available (see [Appendix 3](#)). Their status is that of a recommendation, which can be deviated from without reasons having to be stated.

The Site Rules contain rules and regulations that have been defined by Chemelot Site Permit B.V. (CSP B.V.), by the Chemelot Site Policy Board, by DSM NL B.V. and by Sitech Services B.V., each on the basis of its own tasks and responsibilities.



The responsibilities are divided as follows:

### CSP B.V.:

- Notifications
- Permits
  - Permit under the Environmental Management Act
  - Greenhouse gases emission permit
  - Site permit under the Atomic Energy Act
- Emergencies

[Chapter 2](#)

[Chapter 6, section 6.2](#)

[Chapter 6, section 6.3](#)

[Chapter 6, section 6.4](#)

[Chapter 8](#)

### Policy Board:

- Safety, health and environment
- Security
- Shutdown programmes

[Chapter 5](#) excl. section 5.9B

[Chapter 7](#)

[Chapter 9](#)

### DSM NL B.V.:

- Soil and Infrastructure
- Permits
  - Soil Cleanup Action Plan
  - Groundwater extraction permit

[Chapter 3](#)

[Chapter 6, section 6.6](#)

[Chapter 6, section 6.7](#)

### Sitech Services B.V.:

- Infrastructure
- Transport safety, rail transport
- Permits
  - Discharge permit: permit under the Surface Water Pollution Act

[Chapter 4](#)

[Chapter 5, section 5.9.B](#)

[Chapter 6, section 6.5](#)

No legal texts or references to legislation are included in the Site Rules, unless legislation does not explicitly apply on the site (such as the road traffic regulations).  
The Site Rules do not include permit texts, either.

Contents

General

Notifications

Soil and site  
planning

Infrastructure

SHE

Permits  
(governmental)

Security

Emergencies

Shutdown and  
start-up  
programmes



### 1.3 Legislation and regulations

Dutch legislation applies on the Chemelot site. Under this legislation each site user and external company has its own responsibility as an employer to ensure that their staff are kept up to date with and comply to the requirements of the relevant legislation and regulations.

Primary site users must comply with all permit conditions included in the umbrella site permits.

In addition, they must comply with the conditions of their specific plant permits (sub-permit).

Primary site users must have a code of conduct in place to ensure that their employees comply with the requirements of legislation and regulations and must communicate this code of conduct to their employees.

### 1.4 Implementation, follow-up and audits

The line organization of each site user is responsible for implementation of and compliance with the Site Rules, also by external companies engaged by them.

CSP B.V., Policy Board, DSM NL B.V. and Sitech Services B.V. have a right to audit compliance with the Site Rules with regard to matters specific to their sphere of responsibilities (see [section 1.2](#)).

For procedures and systems, please refer to the agreements in the relevant Management Handbooks.

### 1.5 Site Rules management cycle

The management cycle used is the PLAN - DO - CHECK- ACT quality circle shown in the table below.

CSP B.V., Policy Board, DSM NL B.V. and Sitech Services B.V use this management cycle for the parts of the Site Rules for which they are responsible (see [section 1.2](#)).

Element	Comprises	Responsibility
Plan	Regulations	Chemelot Site Permit B.V. Policy Board DSM NL B.V. Sitech Services B.V.
Do	Implementation	Site users / external companies
Check	Auditing - compliance with regulations - effectiveness of regulations	Chemelot Site Permit B.V. Policy Board DSM NL B.V. Sitech Services B.V.
Act	Adjustment, corrective actions	Chemelot Site Permit B.V. Policy Board DSM NL B.V. Sitech Services B.V.

Contents

General

Notifications

Soil and site planning

Infrastructure

SHE

Permits (governmental)

Security

Emergencies

Shutdown and start-up programmes

### 1.6 Regulations compliance policy

Breaches of legislation and regulations by site user and external company staff will be dealt with in accordance with the guideline for the legislation compliance policy, see section 3. of the Policy Board / Operational Board Management Handbook.

### 1.7 Communication

The Site Rules are accessible only via the Internet.

Amendments to the Site Rules are communicated by means of a change bulletin, which is sent by email to site users / site occupants.

Site users / site occupants can address requests to add or remove email addresses to or from the change bulletin mailing list to [OB.Secretariaat@sitech.nl](mailto:OB.Secretariaat@sitech.nl).

### 1.8 Exemptions

Requests for an exemption by site users or external companies are to be submitted in writing to the site management programme manager while stating the reasons. The programme manager takes care of further processing.

For exemptions regarding SHE training courses, see 5.3.3.

### 1.9 Management of Site Rules

The site management programme manager is responsible for management of the Site Rules. Any proposals to amend or supplement the Site Rules can be submitted to this programme manager.

Owners / board delegates are responsible for approval or rejection of proposals to amend or supplement the Site Rules, if necessary after having sought the advice of the relevant experts who assess the contents of such proposals.

The final responsibility rests with CSP B.V., Policy Board, DSM NL BV and Sitech Services B.V.

Contents

General

Notifications

Soil and site  
planning

Infrastructure

SHE

Permits  
(government-  
tal)

Security

Emergencies

Shutdown and  
start-up  
programmes



## 2. NOTIFICATIONS

### 2.1 Reporting and registering abnormal occurrences pursuant to:

- **Environmental Management Act [Wet Milieubeheer (Wm)]**
- **Decree on Major Accident Hazards [Besluit Risico Zware Ongevallen (BRZO)]**
- **Water Act**

When carrying out professional activities on-site, abnormal occurrences may occur, which may cause detrimental effects for the environment and/or feelings of disquiet both on and off the site. When this type of abnormal occurrences occurs on-site, the permit holder involved must carry out the following on the basis of the Environmental Management Act, the Decree on Major Accident Hazards or the Surface Water Pollution Act:

- He/she must take all measures in order to limit the detrimental consequences of the abnormal occurrences
- He/she must register the abnormal occurrences in the manufacturing logbook for the factory involved and, depending on the scope and severity of the abnormal occurrences, report this to the competent authority as quickly as possible after detection.

The abnormal occurrences should be reported to the proper authority by telephone and in writing:

- The Province of Limburg (PL): Reports within the scope of the Environmental Management Act and the Decree on Major Accident Hazards.
- The South-Limburg Incident Room (MZL): GRIP reports.
- The Water Pollution Guard: Reports within the scope of the Water Act.

For further information, please refer to the ["Checklist for notification in the context of abnormal occurrences on the Chemelot Site"](#).

The definition of an 'abnormal occurrences' is as follows:

Any occurrence that is considered to be abnormal of everyday operational management, which has or may have harmful consequences for the environment and which could result in feelings of disquiet in the environment surrounding the site.

To all intents and purposes, this means that an abnormal occurrences has resulted in:

- An LOPC resulting in the instantaneous release of gaseous, liquid or solid substances which may result or has actually resulted in a direct threat to humans (exposure/intoxication) or to disquiet and discomfort on or off the site.  
The consequences of this type of incident are also discernible off the site (vapor, odor, damage) and have resulted in complaints.
- Exceeding the permit standard specified in the environmental permit.
- Contamination of the surface water in Stein harbor and/or the Slakbeek.
- Alarm phase GRIP 1, 2, 3 or 4.

The Regulation regarding the Reporting of Abnormal Occurrences applies to all site users who have their own all-in-one Permit for Physical Aspects sub-permit or who form part of an Infrastructure sub-permit on the basis of the Order of Activities for the Environmental Management Act.

Contents

General

Notifications

Soil and site planning

Infrastructure

SHE

Permits (governmental)

Security

Emergencies

Shutdown and start-up programmes



According to article 17 of the Environmental Management Act, the following assignment will be processed internally:

- **Direct government reporting procedures:**  
All abnormal occurrences, as described in the "[Checklist for notification in the context of abnormal occurrences on the Chemelot Site](#)", should be reported to the Province of Limburg, the South-Limburg Incident Room and/or the Water Pollution Guard as soon as these have been identified (within a period of 30 minutes) via the Park Services Central Incident Room.  
The Park Services Central Incident Room should be notified by telephone and this report should be confirmed by e-mail using the "[Meldingsformulier ongewoon voorval](#)" [*abnormal occurrences report form*].
- **Permit reporting format**  
These are instances of the emission standards in the various environmental permits being exceeded. This should be reported to CSP/Sitech, which will inform the Province of Limburg. Reporting should take place as soon after it is observed or known that the standards are exceeded (measurement results) using the "[Meldingsformulier overschrijding luchtemissies t.b.v. provincie Limburg](#)" [form for reporting higher-than-permitted emissions to the Province of Limburg]. This form is to be submitted to CSP BV, which informs the Province of Limburg.  
When the discharge standards specified in the Water Act permit are exceeded, this is to be reported as soon as possible after being observed by means of the "[Formulier overschrijding lozingsnorm Waterwetvergunning site Chemelot](#)" [form for reporting discharges exceeding the Water Act permit standards] to Sitech, which will inform Waterschap Roer en Overmaas (Water Authority).
- **Registration in the manufacturing logbook:**  
Environmental incidents that do not cause a significant environmental impact and are not externally perceivable do not meet the criteria defined in the "[Checklist for notification in the context of abnormal occurrences on the Chemelot Site](#)". These occurrences do not have to be reported to an external agency – a mention in the manufacturing logbook/ARIA system of the relevant site user will suffice.

For the above categories the agreements apply that are laid down in the "[Checklist for notification in the context of abnormal occurrences on the Chemelot Site](#)".

### Follow-up report:

For all incidents that result in prompt government reporting procedures, a "[Achteraf rapportage ongewone voorvallen](#)" (follow-up report Abnormal Occurrences) must be sent to the proper authority (Province of Limburg) within 10 working days of making the initial report. The procedural route runs via CSP B.V.

A report will be compiled by CSP on the website of Chemelot regarding the incident concerned within 48 hours of this incident having been detected and after a consultation has taken place with the site user involved.

The site user involved can then make the decision regarding whether or not to place additional information on his/her own website (via a link).

Authorities involved in the Decree on Major Accident Hazards (Province of Limburg, Labor Inspectorate, Regional Fire Brigade) may request additional information at any time, including within the scope of an inspection by the Province of Limburg/Decree on Major Accident Hazards, on the basis of a report received.

Contents

General

Notifications

Soil and site planning

Infrastructure

SHE

Permits (governmental)

Security

Emergencies

Shutdown and start-up programmes



## 2.2 Reporting other occurrences (overview)

Occurrences	Report to	Telephone
Accidents, near misses, hazardous situations, abnormal occurrences	Area manager 1)	
Accidents requiring medical assistance	Park Services	046-47 66666
Abnormal occurrences (examples: fire, explosion, gas leaks, etc.)	Park Services	046-47 66666
Transport incidents (road, rail, inland waterway)	Park Services	046-47 66666
Internal environmental complaints	Park Services MKS	046-47 63333
Security incidents (criminal offences, dishonest acts, sabotage, etc.)	IBL : Area manager 2) 3) OBL: Park Services	046-47 64848
Traffic incidents	IBL : Area manager 3) OBL: Park Services	046-47 64848
Damage	IBL : Area manager 3) OBL: Park Services	046-47 64848
Lost or found property	Gatekeeper entrances or Park Services	046-47 64848
Lost, missing or unusable site pass	Gatekeeper entrances or Park Services	046-47 64848
Infrastructure defects, shortcomings, etc. (roads, signage, etc.)	Sitech Site Office reporting point	046-7022533
Slippery roads OBL	Park Services	046-47 65900
Utility disruptions/defects, incl. contaminated drinking water	USG, duty officer if no answer: USG, head mechanic	046-7021111 046-7021121
Soil contamination	Sitech Site Office; <a href="#">see 3.1</a>	
Higher than permitted emissions to air	CSP B.V.; <a href="#">see 6.2.2</a>	-----
Greenhouse gases emission permit: measurements, incidents and/or deviations	Officer Permit Emission Trading; <a href="#">see 6.3</a>	
Irregularities in compliance with Nuclear Energy Act permit requirements	RAS Management; see also <a href="#">6.4</a>	046-47 61406
Irregular discharge pattern	IAZI control room; see also <a href="#">6.5</a>	046-47 64797

- 1) OBL notifications within one working day, preferably by email, to area manager OBL (Sitech Site Office Chemelot).  
Each site user handles occurrences in accordance with their own internal guidelines. For recording of accidents, [see 5.2](#).
- 2) The area manager determines whether the regional police force must be called in, [see 7.7](#)
- 3) The area manager determines whether Park Services must be called in.



### 3. SOIL AND SITE PLANNING

#### 3.1 Soil contamination or deterioration

- Each instance of soil contamination or soil deterioration must be reported as soon as possible to 'Bodembeheer' ([info-bodembeheer@rhdhv.com](mailto:info-bodembeheer@rhdhv.com)) in writing by the originator (\*) regardless of the quantity and nature of the substance involved, using the "[Meldingsformulier bodemverontreiniging](#)" (Soil contamination reporting form). 'Info-bodembeheer' will report the request to DSM Nederland BV.
- The originator (\*) must take all measures necessary to reverse the soil contamination or soil deterioration, and take any temporary measures necessary to prevent further spread of the contamination, all to the satisfaction of DSM NL B.V..

(\*) "Originator" is taken to mean the site user who is established on the Chemelot site through a leasing agreement and who owns the product released, or who engaged third parties or external companies whose actions have caused soil contamination.

#### 3.2 Soil investigation prior to construction, excavation and demolition activities

- 'Bodembeheer' ([info-bodembeheer@rhdhv.com](mailto:info-bodembeheer@rhdhv.com)) (Soil Management) are to be informed well ahead of the commencement of construction, excavation or demolition activities by means of the "[Aanvraag bodemonderzoek voorafgaande aan bouw-, graaf- of sloopwerkzaamheden](#)" (Application form for soil investigation prior to construction, excavation and demolition activities). This is to allow them to determine the environmental quality of the soil and the associated SHE measures and soil cleanup measures as well as the destination of any arisings.

CROW400 is in full applicable, explicitly the judgement based on soil analysis by originator/ordering party whether the soil/grounds works can be executed on an OSHA safe manner. This judgement is per CROW400 work of an qualified HVK-DLPr certified person acting legally on behalf of originator/ordering party. See also [SR voorschrift 'Bodem'](#).

#### 3.3 Site planning approval

- Site planning approval must be obtained from DSM NL B.V. (Site Planning and Infrastructure) for the following activities:
  - Infrastructural or spatial modifications to OBL or logistical developments/modifications in type, routing or volume
  - Expansion of site users' activities beyond their lease areas
  - Modification of lease area boundaries and areas for which area managers are responsible
  - Temporary use of site areas (for product storage, shutdowns, etc.) to the extent that this takes place outside the allocated contractor shed parks

Contents

General

Notifications

Soil and site planning

Infrastructure

SHE

Permits (governmental)

Security

Emergencies

Shutdown and start-up programmes



## 4. INFRASTRUCTURE

### 4.1 SiteView for OBL pipes and OBL cables

#### 4.1.1 General

In SiteView, an information system used by Sitech Site Office, the data registered includes object information relating to OBL pipes and OBL cables at the Chemelot Site.

The object owner is responsible for supplying the correct and up-to-date object data to Sitech Site Office in accordance with the "SiteView instructions" relating to the as-built status of underground and aboveground pipes and cables. The as-built data must be supplied within the deadlines stated in the instructions.

#### 4.1.2 Underground infrastructure: topographic information

Regarding topographic information about the underground infrastructure (cables and pipes), the following additional obligations apply to site residents:

- SiteView is to be used when requesting topographic information.
- If any changes are to be made, the as-built topographic information must be provided to Sitech Site Office within 4 months of their implementation for processing in SiteView; site residents must guarantee that this obligation is met within their own management systems, preferably as part of the MOC procedure, with the change remaining open until the provision of information has been completed.
- Sitech Site Office must be notified of any topographic information on the underground infrastructure found to be missing or incorrect in SiteView, to allow corrections to be made in SiteView.
  - OBL: by calling in the Sitech Site Office Shift Supervisor in order to take a photo.
  - IBL: by supplying a photo of the location of the cables and pipes in question.

### 4.2 Modifications impacting OBL provisions

- Where site users use OBL pipe racks, sewers, underground routes and roads for their piping, cables and other installation components, they must report proposed installation or modification of such piping, cables and other installation components to Sitech Site Office for discussion by the Acceptance Committee OBL. Implementation may commence only following approval by the Acceptance Committee OBL.
- In case projected above-ground project in the vicinity on or above underground infrastructure (<10 meter) the initiator of such above-ground project has to consult the infrastructure owner-administrator(s). Likewise the initiator of projected changes underground infrastructure will consult the owner-administrator of above-ground facilities/plants in the design-phase of the project. Basis of information will be the "Excavation information application form". Starting point of the deliberations will be the standard approach "do not build on/near underground-infrastructure, unless the risks are acceptable to all parties concerned". Decisions regarding risks and administrative agreements will be put in writing. All above is valid in all 'huisbaasgebieden'.

Contents

General

Notifications

Soil and site planning

Infrastructure

SHE

Permits (governmental)

Security

Emergencies

Shutdown and start-up programmes



#### 4.3 Access to roads, grounds and sites

- Intends to temporary or permanent changes in traffic situations, accessibility c.q. blocking roads and grounds, will be reported or requested timely (a.s.a.p. with the intend reporting minimum one month in advance) in order to check, advice and detail tuning via the traffic committee. The traffic committee assesses aspects of road safety, traffic-law and accessibility by emergency services. The acceptance committee Sitech Site Office can ask the traffic committee an expert opinion.
- Change Requests can be made via "[Meldpunt Site Infra](#)" orally or in writing to the Sitech Site Office.
- Signage and diversions OBL must be established in consultation with the Sitech Site Office be established and implemented in accordance with the requirements of the "Statutory Rules traffic rules and traffic signs" and adhere to the written advice of the traffic committee given to the acceptance committee Sitech Site Office.

#### 4.4 Installation and removal of temporary accommodation OBL (contractor sheds, tents, units, etc.)

- The form "[Toestemming voor het plaatsen en afvoeren van een accommodatie](#)" (Permission for installation and removal of accommodation) is to be used for requesting the permission of Sitech Site Office for these activities; the specified conditions are to be met.

#### 4.5 Signage and route diversions OBL

- These are to be decided upon in consultation with Sitech Site Office and must be in accordance with the requirements of the Traffic and Road Signs Regulations.

#### 4.6 Provision of greenery, weed control, pest control

- These activities may be carried out OBL exclusively when ordered by Sitech Site Office.
- Pest and weed control agents and methods used IBL and OBL shall be exclusively those permitted by government agencies

#### 4.7 Pipe ways/pipe racks

- No flammable materials must be stored below or adjacent to pipe racks, no vehicles may be parked there and no structures (temporary or otherwise) may be located there.
- A horizontal free zone of 1 m applies around any column pipe carrier.
- Site users inform one another in advance of any work to be carried out on pipe racks in the vicinity of pipework belonging to other site users.

N.B. For a concisely information packet with regard to the requirements for performing work in the OBL-area at the Chemelot Site, see Werk in uitvoering OBL, edited under the responsibility of the manager Site Infra Sitech Services.

Contents

General

Notifications

Soil and site planning

Infrastructure

SHE

Permits (governmental)

Security

Emergencies

Shutdown and start-up programmes



## 4.8 Excavation and earth-moving works

- Excavation and earth-moving works must be carried out in accordance with:
  - CROW 400

In order to avoid unnecessary costs each Site User will report soil analysis results to [info-bodembeheer@rhdhv.com](mailto:info-bodembeheer@rhdhv.com) for purposes of reusing data and maintaining oversight regarding the Chemelot soil quality.

Attention: CROW400 asks explicitly for analysis and judgement regarding soil quality w.r.t. establishing the correct ARBO safety class. This has to be executed by an MVK/HVK\*) working on behalf of ordering party. An MVK/HKV \*) level is required and valid DLPr certificate is mandatory  
All in accordance with [SR-voorschrift 'Bodem'](#)

- SIR Handbook (Industrial Cleaning Foundation) Pressure/Vacuum Cleaning, including vacuum excavation.
- Site Users comply with the requirements of the Underground & Surface Grids (Information Exchange) Act regarding land registry obligations, whereas Chemelot has an specific way of operating in view of this obligation (working via Site View; see [SR Voorschrift Graaf en Grondroerende werken](#))

At the Chemelot site, additional requirements apply with regard to

1 → See [SR Voorschrift Bodem](#)

2 and 3 → see [SR Excavation and Earth-moving Works Regulations](#).

- Requirements / Instructions

To receive permission to carry out excavation and earth-moving works, the employees involved must be able to prove that they have been instructed in accordance with the Site Regulations included in Training and instructions (paragraph 5.3) and must also be familiar with the Chemelot Excavation and Earth-moving Works Regulations.

Contents

General

Notifications

Soil and site planning

Infrastructure

SHE

Permits (governmental)

Security

Emergencies

Shutdown and start-up programmes



## 5. SAFETY, HEALTH AND ENVIRONMENT

### 5.1 SHE care

All activities carried out on the Chemelot site by site users and external companies must be in accordance with the objectives set out for the site:

- to provide an injury-free and incident-free workplace;
- to prevent all disabilities or health problems relating to activities on the Chemelot site;
- to evaluate and improve our practices and services continuously in order to make these safe and acceptable to employees, the customers and nearby communities;
- to ensure that the carrying capacity of the environment is not affected.

Primary site users must have a SHE management system in place, taking in SHE care both for their own personnel and personnel of external companies (incl. hauliers) and including inter alia the SHE policy, its operational implementation and the structure of SHE responsibilities. Where SHE standards and values are concerned no difference is made between site user staff and staff of external companies.

Additionally, use of the 12 Life Saving Rules on the Chemelot site is strongly recommended. The purpose of these Life Saving Rules is to protect everyone against workplace hazards and raise awareness of a limited number of crucial rules in this field; rules that can save lives.

Some of these Life Saving Rules are included elsewhere in the Site Rules as 'hard rules'. It should be clear that in such cases the recommendation to use the Life Saving Rules becomes a 'hard rule'.

The 12 Life Saving Rules:

1. No drugs and residual drug substances in blood during presence on Chemelot premises; smoking only allowed in designated areas; zero-tolerance w.r.t. alcohol (see also 5.11)
2. Work with a valid work permit when required (see also 5.5)
3. Test the quality of the internal atmosphere before entering a confined space (see also 5.5.2.1)
4. Lock out, tag out and try out before work on machines or equipment begins (see also 5.7)
5. Obtain authorization before line breaking
6. Obtain authorization before overriding or disabling safety critical equipment
7. Protect yourself against a fall when working at height
8. Lifting and hoisting: do not enter a danger zone where objects can fall (see also 5.4.1)
9. Comply with management of change when required
10. Follow your journey management plan
11. Wear your seatbelt
12. Drive responsibly and comply with local law

See also the [Life Saving Rules Chemelot Site Best Practice](#), which gives additional information.

Primary site users are area managers, which implies they bear full responsibility for SHE care within the area they lease (IBL area), their main tasks being:

- to set out tasks, powers and responsibilities in relation to SHE
- to identify the SHE risks associated with the activities carried out within their area
- to take appropriate measures to reduce the SHE risks to an acceptable level

For the division into areas of the Chemelot Site and a list of area managers, please see Extranet.Chemelot.com > Locatie Chemelot > Huisbaasgebieden.

The site user's line organization is responsible for appointment of the area managers in its areas. When a new area manager takes over, a handover protocol applies. This protocol is drawn up by a coordinator appointed by the site user.

Sitech Site Office RHDHV ([toine.krahmer@rhdhv.com](mailto:toine.krahmer@rhdhv.com)) receives a copy of the cover page of this handover protocol so as to enable updating of the list of area managers.

For further information, please see "[Regulation for determination of areas and appointment of area managers](#)", which includes:

- a summarized overview of area manager tasks
- a model handover protocol.



The OBL area, which is situated between IBL areas, is partly designated as consultation area. If work is to be carried out in a consultation area, this will be the subject of consultation between the OBL area manager and the relevant IBL area manager.

The OBL area manager and the relevant IBL area managers jointly decide about designation of consultation areas.

The consultation areas are shown as shaded sections on area maps.

The line management within the leased area is responsible for the SHE aspects of the activities to be carried out.

The owner of the buildings in the leased area is responsible for the civil engineering safety of these buildings.

When not acting as line management and/or building owner, the site user in a leased area transfers his SHE responsibility in writing to the relevant line management and/or the building owner.

Ownership boundaries (locations where ownership passes from one owner to another) and maintenance management boundaries (locations where maintenance passes from one maintenance organization to another) must be recorded on geographical plans.

Site users and USG must establish production management boundaries. These are the boundaries in the utility connections up to which USG is responsible for the operation of the installations.

Contents

General

Notifications

Soil and site  
planning

Infrastructure

SHE

Permits  
(government-  
tal)

Security

Emergencies

Shutdown and  
start-up  
programmes



## 5.2 Recording accidents and environmental incidents at site level

### 5.2.1 General

Every month, the Operational Board Secretariat compiles the "Chemelot Site Safety and Environmental Performance Report".

No later than the fifth working day of the following month, the (primary and non-primary) site residents will send an overview in a set format to the Operational Board Secretariat, listing all relevant safety and environmental incidents that have occurred on the site.

In that overview, recordable incidents will be listed per category:

- The number of incidents, subdivided into:
  - 1..1. Own employees (the site resident is the hierarchical employer)
  - 1..2. Contractors' employees (the site resident is the contractor's client)
- The number of own employees
- The number of contractors' employees
- Concise description of the history of the incident and of any injuries sustained

Categories of recordable incidents according to OSHA:

- Accidents causing absence (LWC)
- Accidents requiring adapted work (RWC)
- Accidents not causing absence – medical treatment (MT)

### 5.2.2 Personal safety

Recordable incidents are reported in accordance with the **OSHA 1904.7** regulations, stating the severity of the incident involved:

- Accidents causing absence (LWC)
- Accidents requiring adapted work (RWC)
- Accidents not causing absence – medical treatment (MT)

These will be broken down into:

- 1.1. Own employees (the site resident is the hierarchical employer)
- 1.2. Contractors' employees (the site resident is the contractor's client)

A concise description of the history of the incident and any injuries sustained will also be provided.

### 5.2.3 Process safety

Recordable process safety incidents are reported in accordance with the **CEFIC 2016** standard.

A concise description will be given of the history of the incident, the number and severity of any casualties, financial losses, whether evacuation was required, the medium and the quantity of hazardous substance released, including the maximum emissions within a single hour while the incident was in progress.

Contents

General

Notifications

Soil and site planning

Infrastructure

SHE

Permits (governmental)

Security

Emergencies

Shutdown and start-up programmes



#### 5.2.4 Environment

Recordable incidents affecting the environment are reported in accordance with the high threshold value of the Seveso III Directive (discharges, soil pollution).

A concise description will be given of the history of the incident, its severity, the medium and the quantity of hazardous substance released and the H-phrase(s) that apply.

#### 5.2.5 Number of personnel

The performance indicators for personal and process safety performance are normalized, based on the actual number of hours worked by the company's own employees and by contractors' employees.

#### 5.2.6 Responsibilities

##### Primary site residents

The primary site residents, grouped according to Plants & Sitech, SABIC, DSM Nederland and VOS (members) are themselves directly responsible for sending the above overview to the Operational Board Secretariat in good time.

##### Non-primary site residents

1. The activities of non-primary site residents are undertaken in accordance with a KOW sub-permit issued under the Dutch Environmental Permitting (General Provisions) Act (WABOm). The sub-permit holders Sitech Site Services and SABIC B.V. are responsible for:
  - Providing the Operational Board Secretariat with an up-to-date overview of non-primary site occupants covered by their own KOW permit (name of site occupant, address details including email address, contact person and telephone number).
  - Supplying the incident data recorded by the non-primary site residents within their own KOW permit to the Operational Board Secretariat. If a non-primary site resident fails to report its incident data on a monthly basis, the matter will be escalated to the holder of the KOW sub-permit.

As a sub-permit holder, DSM NL B.V. will itself be responsible for ensuring that all of the incident data of the non-primary site residents covered by its own KOW permit is provided.
2. The activities are undertaken in accordance with a sub-permit issued under the Dutch Environmental Permitting (General Provisions) Act (WABOm)
 

This only concerns the activities permitted under the sub-permit held by DSM Industriegrond B.V. and are performed by contractors housed in the contractor parks of DSM NL B.V. The incident data relating to these non-primary site residents are sent by DSM NL B.V. to the Operational Board Secretariat each month in the form of a summary table (in a set format), no later than the fifth working day of the subsequent month.

Contents

General

Notifications

Soil and site planning

Infrastructure

SHE

Permits (governmental)

Security

Emergencies

Shutdown and start-up programmes



### 5.2.7 Incidents in the OBL area while the company's own employees are traveling between home and work and during the arrival and departure of contractors' employees

Recordable incidents within the meaning of OSHA 1904.7 that took place in the OBL area while the company's own employees are traveling between home and work and during the arrival and departure of contractors' employees are not listed by the site residents in the summaries submitted.

These incidents are listed in a monthly summary by the landlord OBL, which is sent to the Chemelot Site Permit Secretariat no later than the fifth working day of the subsequent month. The summary will list recordable incidents, their severity and a concise description of the history of the incident and any injuries sustained.

### 5.2.8 Chemelot Site Safety and Environmental Performance Report

The Chemelot Site Safety and Environmental Performance Report includes:

- The total personal safety performance of IBL (for the company's own and contractors' employees), including a breakdown by:

IBL primary site residents

- Plants serviced by Sitech Manufacturing Services (SMS Plants)
- Sitech
- SABIC
- DSM NL B.V.
- VOS

IBL non-primary site residents

Recordable incidents within the OBL area.

- Process safety performance, including a breakdown by:  
IBL primary site residents
  - Plants serviced by Sitech Manufacturing Services (SMS Plants)
  - Sitech
  - SABIC
  - DSM NL B.V.
  - VOS
- Environmental performance
- A "Safety and Environmental Performance Report for Brightlands Chemelot Campus" will be drawn up separately in accordance with **OSHA 1904.7** and **CEFIC2016**

Contents

General

Notifications

Soil and site  
planning

Infrastructure

SHE

Permits  
(government-  
tal)

Security

Emergencies

Shutdown and  
start-up  
programmes



## 5.3 Training and instruction

### 5.3.1 Site access instruction

- Before personnel of site users and contractors, as well as drivers of freight vehicles may access the site without supervision, they are required to have attended the site access instruction and successfully completed the associated test.  
Please see validity of the company pass, [paragraph 7.2.1](#), for information about the validity of the site access instruction.

Employees can choose to follow the site access instruction in Dutch, English, German or French. Successful completion of the associated test, including period of validity, is electronically recorded in the AEOS access registration system.

Upon expiry of the period of validity, the employee's access to the site is automatically blocked unless the information in the AEOS access registration system has meanwhile been updated because the employee has again attended the site access instruction and passed the test.

Drivers of freight vehicles are shown the site access instructions in a "mime"-based safety film. Successful completion of the associated test, including period of validity, is recorded electronically in the AEOS access registration system.

Upon expiry of the period of validity, the driver's access to the site is automatically blocked unless the information in the AEOS access registration system has meanwhile been updated because the driver has again attended the site access instruction session and passed the test.

### 5.3.2 Plant safety instruction session (primary site users)

- Before employees of site users, contractors and hauliers are allowed to work independently on or in the vicinity of a plant or installation, they are required to have attended the general plant safety instruction session and successfully completed the associated test.  
Please see validity of the company pass, [paragraph 7.2.1](#), for information about the validity of the general plant safety instruction session.

Employees can choose to attend a general plant safety instruction session in Dutch, English, German, French, Polish or Portuguese.

Successful completion of the associated test, including period of validity, is electronically recorded in the AEOS access registration system. The employee furthermore receives a certificate showing the period of validity.

In addition, contractor and haulier employees receive a plant information sheet for each plant where work is to be performed. This sheet describes the special risks and conditions of the plant or installation.

### 5.3.3 VCA SHE training courses (Primary site users)

- The Basic Safety VCA course or equivalent is mandatory for site user employees working in the line organization of the plants (including loading attendants and forklift truck drivers, but excluding administrative staff).
- The Basic Safety VCA training course or equivalent is mandatory for contractor staff carrying out work with an increased risk (see [section 5.8](#)).  
The Safety for Operational Managers VCA training course or equivalent is mandatory for contractors' operational management and supervisory staff.

Decisions about the equivalency of training courses are taken by the site user (area manager). In exceptional cases the site user (area manager) can grant exemption from the VCA SHE training requirements, if necessary while indicating supplementary measures to be taken (for instance extra supervision).

The site user (area manager) supplies a copy of any granted exemptions to the SHE owner / delegate representing the site user within the Operational Board.

Contents

General

Notifications

Soil and site planning

Infrastructure

SHE

Permits (governmental)

Security

Emergencies

Shutdown and start-up programmes



### 5.4 Working conditions

#### 5.4.1 Barriers

- Appropriate barriers must be provided in hazardous situations and during work presenting hazards. This is to be done in conformity with the table below

Situation	Barrier
Plant out of service	Crush barriers or continuous fencing
Open grated flooring, pit or gutter	Uprights and horizontals
Acid/caustic treatment of equipment High pressure bead or grit blasting Welding, grinding, lifting, scaffold erection/ disassembly Activities in pipe racks	Red and white barrier tape or chain combined with pictogram signs
High pressure jetting Work with X-rays	Yellow and black barrier tape combined with pictogram signs
Hoisting operations	Special red and white barrier tape with printed inscription
(Demolition) work involving asbestos- containing products	Yellow/black barrier tape or chain and warning notice

#### 5.4.2 Measures to be taken in the event of exceptional weather conditions

- When thunderstorms, high winds/wind gusts and fog/poor visibility are expected, this will be announced by the Central Control Room via the PA system. The area managers are responsible for any measures to be taken.  
In exceptional weather conditions the Duty Officer - Park Services will take the initiative in advising the Head of the Action Center to take further measures or to call for further measures to be taken in relation to road transport (hazardous substances) on site.  
The Head of the Action Center has the authority to take further measures or to call for further measures to be taken in relation to road transport (hazardous substances).  
This can be the suspension of road transport (hazardous substances) or the enforcement of additional conditions on road transport (hazardous substances), for example a change to the maximum speed and/or the need for vehicles to be accompanied by a snowplow or by Park Services.  
Details of any measures taken will be communicated via the public-address system.  
Site users and Park Services will notify the hauliers of these measures.

#### 5.4.3 Sending of samples

- It is not allowed to send samples of hazardous or non-hazardous goods by internal mail.

#### 5.4.4 Specific activities

- Hoisting operations:  
Hoisting operations over process plants, pipe racks or pipelines of other owners must in advance be coordinated with these owners so that where necessary safety precautions can be taken.

#### 5.4.5 Cleaning of equipment prior to removal for maintenance, inspection and scrapping

- The "Reinigingsformulier" (Cleaning form) is to be completed when equipment is cleaned prior to removal for maintenance, inspection and scrapping.

Contents

General

Notifications

Soil and site  
planning

Infrastructure

SHE

Permits  
(government-  
tal)

Security

Emergencies

Shutdown and  
start-up  
programmes



## 5.5 Work permits (Primary site users)

### 5.5.1 Work permit, general

Whenever IBL and OBL activities are carried out which do not form part of the normal operational activities and which may give rise to special risks, the site user must apply a work permit system in conformity with "Voorschrift Site Werkvergunning (Site Work Permit Regulation).

The site user decides when special risks are present, taking into account the provisions of [section 5.5.2](#).

The Site Work Permit Regulation comprises:

- the "Formulier Site Werkvergunning" (Site Work Permit form) [to be used](#)
- [a description of the roles involved in the work permit process](#).

The site user determines the site work permit procedure to be used.

For urgent IBL jobs outside normal working hours, the shift supervisor or the continuous shift supervisor acts as head of the commissioning department.

For urgent OBL jobs outside normal working hours the Company Fire Brigade acts as commissioning department.

Furthermore, specific permission procedures must be in place for:

- access to spaces containing high-voltage equipment
- working at heights
- access to roofs in so far as not forming part of the normal operational activities
- all activities that may lead to exposure to asbestos
- work involving radioactive sources.

For further details see the supplementary regulations, if any, of the site user.

The site user has developed a regulation for joint inspection, by the commissioning party and the persons who will be doing the work, of the work area and the equipment and for checking that it is safe to work on the equipment.

The site user has developed a regulation for joint review and agreement, by the commissioning party and the persons who have done the work, on completion of the work.

The site user has laid down how it is assured that all persons doing the work are familiar with and have been instructed in the work to be done and have understood the contents of the work permit.

Contents

General

Notifications

Soil and site  
planning

Infrastructure

SHE

Permits  
(government-  
tal)

Security

Emergencies

Shutdown and  
start-up  
programmes



### 5.5.2 Activities requiring a site work permit

A site work permit is required for the following activities which do not form part of the normal operational activities.

The safety precautions to be taken must be specified on the form.

#### 1. Work in confined and special spaces

- Confined and special spaces are known within the organization and are marked as such.
- Access to confined and special spaces is subject to special measures and conditions (use of outside watch/manhole watch, air conditions, sampling, personal protective equipment, etc).

#### 2. Hot work (welding, torching, grinding, annealing, blasting, etc.)

#### 3. Excavations

- The "[Aanvraag graafinformatie](#)" (Excavation information application form) is to be used to obtain the required information. For soil aspects, [see 3.1](#) and [3.2](#).
- Excavation work is to be performed in conformity with [the Excavation Work Regulation](#).

#### 4. Activities on and close to railway tracks

- A work permit is required for activities within the loading gauge + 3 metres. The loading gauge = 2.5 metres wide from the centre of the rails and 4.8 metres high.
- The relevant area manager must inform the Rail Service Provider at least 24 hours prior to the start of the work (Central Rail Transport Office, tel. 046-47 64196).

#### 5. Industrial cleaning activities

- A work permit is required for all industrial cleaning activities regardless of the cleaning or flushing method used.
- The work permit must indicate whether the "[Reinigingsformulier](#)" (Cleaning form) must be used. The cleaning agents used must not disrupt the permitted pattern of the discharges to the IAZI wastewater treatment plant.
- If contaminated flushing water could enter the sewer, the IAZI Control Room must be contacted in advance (tel. 046-47 64797); if contaminated flushing water has entered the sewer, this Control Room is to be contacted immediately.

#### 6. Hoisting activities

- [See 5.4.4.](#)

Contents

General

Notifications

Soil and site  
planning

Infrastructure

SHE

Permits  
(government-  
tal)

Security

Emergencies

Shutdown and  
start-up  
programmes



## 5.6. LMRA (Last Minute Risk Analysis)

### 5.6.1 LMRA general

Before starting a technical job in the workplace, the employees involved in the execution must carry out a Last Minute Risk Assessment (LMRA).

The aim of the LMRA is that all employees involved in the workplace check whether all HSE risks have been identified and whether adequate control measures have been taken.

The basic principle is that risky activities are only started if adequate control measures have been taken to prevent accidents (*look before you start!*).

The basis of a good LMRA is twofold. On the one hand, a good discussion about the risks. On the other hand, support by using a uniform LMRA card.

The employees involved in the execution of a job must be demonstrably instructed with regard to performing an LMRA, including conducting an LMRA interview.

### 5.6.2 Work for which an LMRA is performed

An LMRA is performed before the start of any technical job.

However, it can be determined per site resident/plant for which jobs it is not necessary to sign the LMRA card.

### 5.6.3 LMRA system

The method and card have been established for the Chemelot Industrial Site.

The method is in accordance with the EPA principle. EPA stands for Environment, Process and Activity.

This obligation does not (yet) apply to the Brightlands Chemelot Campus.

Site residents/plants are responsible for making the required LMRA card available to the employees involved in the execution of a job.

More information about the LMRA and LMRA cards, including order address, can be found on [Chemelot's Intranet](#).

Contents

General

Notifications

Soil and site  
planning

Infrastructure

SHE

Permits  
(government-  
tal)

Security

Emergencies

Shutdown and  
start-up  
programmes



### 5.7. Electrical safety

#### General rules relating to electrical safety:

- Primary site users and contractors must specify the authorized persons as indicated in the NEN standards by name and in writing. The authorized persons must meet the requirements in terms of levels of knowledge and expertise set out in the NEN standards, having demonstrably completed the initial and refresher training requirements.
- Anyone performing non-electrical work in an electrical service room must be instructed about the hazards and the code of conduct before starting this work.
- All site users directly affected must be informed by the officer responsible for the electrical aspects of an installation before installations or parts thereof are switched on or off.
- Immediately before new or modified installations (or parts thereof) are connected, warning notices saying "ONDER SPANNING" (LIVE ELECTRICS) should be provided. Such notices should be removed only when all activities are complete.
- A warning notice saying "NIET INSCHAKELEN" (DO NOT SWITCH ON) should be provided to prevent unintentional switching on.
- Activities in the hazardous zone of a high voltage line may be carried out only after written permission has been obtained from the manager of the line (Essent Intermediate). The hazardous zone covers an area extending 50 metres on each side of the high voltage line, measured from the centre. Where equipment (including hoisting equipment) is used with an overturn radius greater than 35 metres, the hazardous zone shall be 1.5 times the overturn radius.

Contents

General

Notifications

Soil and site  
planning

Infrastructure

SHE

Permits  
(government-  
tal)

Security

Emergencies

Shutdown and  
start-up  
programmes



### 5.8 Contractor safety (Primary site users)

- Contractors must have their own SHE management system in place.
- Contractors carrying out activities with increased risk must hold VCA certification in accordance with the diagram shown below.
 

Activities with increased risk are those involving:

  1. Mechanical engineering activities
  2. Electrical and process control
  3. Civil and structural engineering
  4. Engineering, if fitting services are included
  5. General Technical Services (ATD)
    - o Insulation
    - o Scaffold erection
    - o Industrial cleaning
    - o Surface blasting work/ conservation/painting
    - o Vertical transport (cranes/hoisting)
  6. Demolition work

Direct supplier	Activities		
	Monodisciplinary Routine work Not very complex Limited scope	Multidisciplinary Not only routine work Fairly complex Reasonable scope	Multidisciplinary No routine work Complex Large scope
No subcontractors	VCA*	VCA**	
With subcontractors	VCA**	VCA**	VCA-Petrochemie <sup>1)</sup>
Main contractorship		VCA-Petrochemie <sup>1)</sup>	VCA-Petrochemie <sup>1)</sup>

Subcontractor	Activities	
	Monodisciplinary Routine work Not very complex Limited scope	Multidisciplinary Not only routine work Fairly complex Reasonable scope
<sup>1)</sup> Mandatory due to recertification as from 01-01-2010, in conformity with national guideline (VNCI/VNPI)		
No sub-subcontractors	VCA*	VCA**
With sub-subcontractors	VCA**	VCA**

For more detailed information on VCA, see [www.ssvv.nl](http://www.ssvv.nl).



## 5.9 Transport safety

### Legislation applying to the site:

- Road traffic legislation
- Carriage of Hazardous Substances Act

### Other Chemelot Site Rules:

### A: ROAD TRANSPORT

#### 5.9.1 SHE requirements to be met by hauliers:

The site access requirements for drivers (Access rules 6 chemical companies) apply to the following driver categories:

- Hauliers (liquid + dry cargo)
- Suppliers of raw and auxiliary materials
- Collecting companies

Besides a valid ID, drivers must be able to present a valid HGV licence.

#### 5.9.2 Transit over the site not allowed

- The following hazardous substances (by ADR category) will not be allowed on site, unless ordered by and to be delivered to one of the site users:
  - class 1 : all
  - class 2 : all substances with the label 2.3
  - class 6.1 : all substances in packaging group I
  - class 6.2 : all
  - class 7 : all
  - class 8 : UN 1052 (HF water free)  
UN 1790 (HF in concentrations > 60%)  
UN 1744 (bromine)
  - class 9: UN 3245 (genetically modified micro-organisms)

#### 5.9.3 Transport of hazardous substances on the Chemelot site (within the site boundaries)

- For safety and "Responsible Care" reasons, operations must in principle be carried out in accordance with the requirements of the Carriage of Hazardous Substances Act and the associated regulations on the Land Carriage of Hazardous Substances (VLG). A exemption must be applied for and agreed by the Operational Board. Any exemption application must be accompanied by a positive recommendation from the relevant site user's Transport of Hazardous Substances Safety Advisor.:
- Exemptions already in effect:
  1. Transport document: an internal distribution or sampling order suffices.
  2. Hazards instruction: internal plant instruction or an SDS with enough information on how to act in the event of an incident or emergency, LOPC or a fire close by suffices.
  3. Driver ADR training: Not required for transport of parcels.
  4. Filling level: tanks with a volume > 7500 litres that are filled to between 20 and 80% may be transported also when no wash bulkheads are present because of the speed limitations in force at the Chemelot site.
  5. Label: ADR label and/or Chemical Substances Act label permitted for parcels.
  6. Orange signs: not required for the transport of samples.
  7. Transport by fork-lift truck is allowed (see also 5.9.5).
  8. Transport of dangerous substances in private cars is not allowed.

Contents

General

Notifications

Soil and site  
planning

Infrastructure

SHE

Permits  
(government-  
tal)

Security

Emergencies

Shutdown and  
start-up  
programmes



The following regulations do remain in force:

1. Classification of hazardous substances.
2. Driver ADR training: required for transport in tanks.
3. Maximum filling degree of packagings and tanks.
4. Superscripts: packaging to be provided with name and UN number.
5. Label: ADR label required for transport in tanks.
6. Orange signs: if applicable for parcel transport and transport in tanks.
7. Suitability, acceptance and inspection of packagings and tanks.
8. Closing devices – numbers and requirement to be closed during transport.
9. Ventilation of vehicles transporting gas cylinders.

### 5.9.4 Loading and unloading

- In an emergency the driver must be accessible so as to be able to move the vehicle on the instructions of the shift supervisor, the continuous shift supervisor or the Company Fire Brigade.

### 5.9.5 OBL transport by fork-lift truck

- OBL transport by fork-lift truck is allowed provided:
  - The route goes over roads directly around the plant.
  - Mass and shape of the load are suitable for transport by fork-lift truck.
  - For transport of hazardous substances:
    - The driver is familiar with the hazards of the substance that is being transported.
    - The cargo consists of fully closed, non-leaking packagings or empty, non-rinsed and closed, non-leaking packagings.
  - The driver has sufficient visibility (incl. any lighting required).
  - The cargo has been stowed so that it cannot tilt, shift or be punctured.
  - Use is made of an orange or yellow revolving light.

### 5.9.6 Checks on drivers' Personal Protective Equipment (PPE):

- This check must be carried out by the commissioning department in which loading/unloading takes place. The PPE will not be checked at the entrances.

### 5.9.7 Addresses for delivery/collection of goods, materials, products etc.

Standard address format:

- Position 1 .....<- Name of site user  
 Position 2 .....<- Standardized INTERNAL title of delivery/collection point  
 Position 3 Chemelot <- Site title (signage around the site bears the name Chemelot)  
 Position 4 Gate – "x" <- Entrance title based upon numbering: see table  
 Position 5 .....<- Street name of Gate: see table  
 Position 6 .....<- Post code/Town of Gate: see table

Entrance	Street	Post code + Town	Explanation
Gate 1	Urmonderbaan 20	6167 RD GELEEN	Industrial Park entrance North
Gate 2	Urmonderbaan 22	6167 RD GELEEN	Campus Entrance
Gate 3			Closed
Gate 4			Closed
Gate 5	Kerenshofweg 101	6167 AE GELEEN	Kerenshofweg Entrance
Gate 6	Prins Mauritslaan 220	6161 RC GELEEN	Beekerveld Entrance
Gate 7	Koolwaterstofstraat 1 A2 Exit 49 Elsloo	6161 RA GELEEN	Entrance South

Contents

General

Notifications

Soil and site planning

Infrastructure

SHE

Permits (governmental)

Security

Emergencies

Shutdown and start-up programmes



### 5.9.8 Traffic routes on the Chemelot site

- In consultation with site users, Sitech Site Office and Park Services determine the mandatory route for freight traffic. This route is recorded on a route map.

### 5.9.9 Special transports

- Special transports must be reported in advance to Sitech Site Office and Park Services using the "[Aanvraagformulier Begeleiding Bijzondere Transporten](#)" (Application form for assistance with special transport).

This applies to road vehicles having:

- a height in excess of 4 metres
- a mass above 55,000 kg
- a total length exceeding 22 metres
- a width exceeding 3 metres
- an axle weight exceeding 12 tons

### 5.9.10 Cleaning of tank containers and road tankers

- The "[Reinigingsformulier](#)" (Cleaning form) is to be filled in when tank containers and road tankers are cleaned on the site.

## **B: RAIL TRANSPORT**

### 5.9.11 General information

- The Rail Service Provider must possess a valid SQAS report. Points for improvement to be implemented as a result of this report will be determined jointly by the Rail Service Provider and Sitech Site Services.
- Product-related risks associated with the transport must be notified to the Rail Service Provider in advance by the site user by means of the dispatch of the relevant (Material) Safety Data Sheets. The Rail Service Provider's staff must be instructed on the product-related risks prior to the transport.
- Site users must record the procedure for handover of wagons to and from the Rail Provider in jointly drafted instructions that include the SHE aspects associated with the transfer.
- The "[Reinigingsformulier](#)" (Cleaning form) is to be filled in when tank and gas wagons are to be cleaned on the site

### 5.9.12 Reporting serious rail incidents

- Serious rail incidents are to be reported to the Rail Issue Team (RIT) using the "[Meldingsformulier ernstige railincidenten](#)" (Serious rail incidents reporting form). Serious rail incidents are considered to be:
  1. Collisions involving only rail equipment
  2. Collisions with other materials, failure to observe structure gauge
  3. Derailments (incl. missing switch points, rail buffer stop)
  4. Signals Passed at Danger
  5. Fire and LOPCs (in conformity with definitions for the transport of dangerous goods; for non-dangerous goods > 1000 kg or l)
  6. Injuries

Contents

General

Notifications

Soil and site planning

Infrastructure

SHE

Permits (governmental)

Security

Emergencies

Shutdown and start-up programmes



## 5.10 Utilities

### 5.10.1 General

- The Utility Support Group's Technical Supply Conditions apply to the supply and back-supply of utilities.

### 5.10.2 Ownership boundaries, production management boundaries and maintenance management boundaries

- Ownership boundaries are determined in consultation between the site user and USG. They will be indicated on geographical diagrams.
- Production management boundaries and maintenance management boundaries are determined in consultation between the site user and USG. These boundaries are indicated on geographical diagrams.
- The battery limit valve associated with a particular connection may be operated solely by USG.

### 5.10.3 Backflow protection

- Backflow protection is mandatory for nitrogen, breathing air and drinking water (in conformity with USG's Technical Supply Conditions).

### 5.10.4 Drinking water

- Connections between drinking water pipework and pipework and equipment used for other media are not permitted.
- Water take-off points that are connected to non-drinking water pipework, which might lead to unintended use as drinking water, shall be marked "Geen drinkwater" (No Drinking Water).
- Drinking water is to be used exclusively for sanitary, domestic and laboratory applications and NOT for industrial applications or cooling purposes.

### 5.10.5 Restrictions on use of compressed air for human consumption

Based on scenario analyses, USG has determined that the compressed air facility at the Chemelot Site cannot always be guaranteed to meet the criteria for ventilation air in terms of availability and composition.

Because of this, the use of compressed air as ventilation air is not advisable, also from a product liability perspective.

The Operational Board therefore advises as follows:

- Not to use fresh air hoods connected to the compressed air network.
- Not to use compressed air for the ventilation of Enclosed Spaces.  
If a site resident still wishes to use compressed air for these applications, a thorough risk analysis must be carried out.
- Use of local facilities.  
The compressed air facility in the central network at Chemelot Site cannot always be guaranteed to meet the criteria for human consumption. It is therefore advisable to use only local air facilities specifically set up for human consumption, following a thorough Management of Change procedure and an assessment based on any applicable Job Safety Analysis. Assessment and modification to suit the situation in and around the plant before use is explicitly required.

## 5.11 Alcohol and drugs

### Possessing, using and being under the influence of alcoholic beverages

and/or drugs on the Chemelot site is not permitted. We have a zero-tolerance policy.

You can find more information in '[Best Practice ADM at Chemelot](#)'.

Contents

General

Notifications

Soil and site planning

Infrastructure

SHE

Permits (governmental)

Security

Emergencies

Shutdown and start-up programmes



## 5.12 Use of mobile telephone

The following requirements apply to the use of mobile phones and other equipment with the same functionality:

Mobile equipment		OBL:	IBL
Telephone function	carrying	permitted	prohibited *)
	use	permitted	prohibited *)

\* Unless exemption has been granted once by area manager for a limited period of time. In the event of an emergency the Company Fire Brigade is authorized to use an appropriate explosionproof zone 1/21 (ATEX Cat. 2G/2D) mobile telephone.

For photo, film and video see 7.6

## 5.13 Use of tablet/laptop in plant environments (IBL)

**Wireless use of tablets/laptops IBL is subject to the following requirements:**

		Tablet/laptop	
		Non-ATEX-certified	ATEX-certified
Inside ATEX zone	carrying	prohibited *)	permitted
	use	prohibited *)	
Outside ATEX zone	carrying	permitted	
	use		

\*) Unless the area manager has granted an exemption for a limited period of time.

It is advised to keep a distance of at least 30 cm from measurement instruments when using a tablet/laptop.

N.B. No further requirements apply to wireless use of tablets/laptops OBL.

For photo, film and video see 7.6

## 5.14 Frequencies available for wireless communication by means of transmission equipment

To prevent communication disruptions, it is not allowed to use unauthorized frequencies for wireless communication by means of transmission equipment\* on the site.

BIM-Sitech Services is responsible for frequency management, including frequency allocation and authorization for wireless communication by means of transmission equipment. Frequencies can be requested by sending an email to [It-Infra.Sitech@sitech.nl](mailto:It-Infra.Sitech@sitech.nl) or by calling 046 4763020. BIM-Sitech Services keeps a register of allocated frequencies and carries out random checks to monitor correct use of frequencies for wireless communication by means of transmission equipment.

If an allocated frequency for wireless communication by means of transmission equipment is no longer used, BIM-Sitech Services is to be notified so that the authorization can be repealed and the frequency re-allocated. This is to be done by sending an email to [It-Infra.Sitech@sitech.nl](mailto:It-Infra.Sitech@sitech.nl) or by calling 046 4763020.



For further information, please see the Frequency Management Best Practice.

\* Transmission equipment includes:

- wireless routers
- walkie-talkies
- beam transmitters
- radio transmitters

### 5.15. Scaffolding

Construction and use of scaffoldings should be done in compliance to "[Regulations Scaffolding](#)".

### 5.16 Transport Committee

- The traffic committee consists of a delegation of up to six Site Users. The committee may (temporarily) be expanded with (traffic) experts, if the situation or modification requires so.
- The traffic committee advises solicited and unsolicited about temporary and permanent traffic situations.
- The traffic committee reviews proposed and existing situations on basis of to the "Statutory traffic rules and traffic signs Rules" and oversees the effective accessibility of roads, grounds and sites for emergency vehicles.
- The traffic committee advises applicants / projects with the aim proposing a pre-reviewed and completed scope to the acceptance committee.
- The traffic committee can propose improvements to the manager Sitech Infra, regarding traffic safety OBL-area, based on their own information.
- Change request will be subject to the decision tree as mentioned in the "Procedure Management of Change Site Sitech Infra OBL".
- The traffic committee will base their rulings on:
  - traffic policy;
  - improvement proposals and complaints regarding traffic;
  - project proposals
- Advice of the traffic committee can be requested via "[Meldpunt Site Infra](#)" orally or writing to the Sitech Site Office.

Contents

General

Notifications

Soil and site planning

Infrastructure

SHE

Permits (governmental)

Security

Emergencies

Shutdown and start-up programmes



## 5.17 LoToTo

### 5.17.1 LoToTo general

LoToTo (Lock Out, Tag Out, Try Out) is the procedure whereby machinery and equipment are made safe for purposes of inspection, maintenance and/or repair operations. This procedure should ensure that personnel are protected from the hazards of machinery and equipment resulting from the release of energy and/or process flows.

Every site occupant with a production and/or distribution plant that entails the risk of releasing substances must have a procedure in place that describes the application of the LoToTo safety system and that indicates the minimum requirements.

### 5.17.2 Minimum requirements

- The procedure must name the roles involved and the associated responsibilities.
- The procedure must provide an overview of the types of energy sources and/or product flows potentially present in the plant
- Each energy source and/or product flow that needs to be isolated (an isolation point) must be clearly and specifically named.
- A list of the isolation points must be present: the LoToTo system. This could be on the work permit for a limited number of isolation points, otherwise on a separate list.
- There must be clear cross-reference between the LoToTo scheme and the work permit.
- The four-eyes principle must be applied in two phases:
  - During the setting up of the LoToTo system to ensure that the system is correct. One person sets up the system, the other authorizes it.
  - During operation of the LoToTo system, to ensure that the system is being performed correctly. One person carries out the LoToTo actions, the other verifies its execution.
- Lock Out: Essentially, all the energy sources and/or product flows must be visibly blocked. The means of blocking must correlate with the possibility of deblocking and its effect.
- Tag Out: Each isolation point must be labelled in the plant, 1-to-1 in accordance with the LoToTo system.
- Try out: For each energy form and/or product flow present, the LoToTo system must describe which Try Out points there are. The Try Out must be performed before the start of the operations.
- The procedure must refer to the interaction of a group lock/personal lock.
- The persons involved in the LoToTo process must be trained for their role.
- The procedure must describe how to deal with overlapping LoToTo systems.

## 5.18 Maximum ground pressure

All the sites at the Chemelot location are classified as 'disturbed soil'.

For the protection of underground infrastructure, the maximum ground pressure permissible on the site is never higher than 20000 kg/m<sup>2</sup>.

If underground constructions are present at a site that could potentially collapse under the influence of vertical or horizontal ground pressure, the proprietor must have an additional survey carried out, whereby the maximum ground pressure is determined prior to the operations.

Contents

General

Notifications

Soil and site planning

Infrastructure

SHE

Permits (governmental)

Security

Emergencies

Shutdown and start-up programmes



## 5.19 Traffic Act

The Dutch General Traffic Act applies to the whole of the Chemelot site.  
The maximum speed at Chemelot is set at 40 km / hour or lower when locally indicated.

Especially in the factory environment, take into account that there are special vehicles and railway crossings exists, adjust your speed accordingly.

On parking lots that are suitable for this, 'reverse parking' is mandatory in order to promote pedestrian and cyclist safety.

This 'reverse parking rule' is not repeated separately on each parkinglot , but applies for the entire Chemelot site, including the parking spaces located outside the fence.

Every traffic participant on the Chemelot site must always be aware of the vulnerability of pedestrians and cyclists in relation to motor vehicles.  
For both the driver of motor vehicles as well as cyclists and e-bikers themselves, there is need for adapted behavior in accordance to the local situation or traffic situation.  
The standard is 'see and be seen' for all road users.

## 5.20 Housing Rules

With regard to accommodation buildings that are not factory facilities, the entire Chemelot site shall be governed by central regulations relating to the protection of personnel from fire, explosions and toxic hazards. The criteria and applicable regulations are available on the intranet.

## 5.21 Assessing environmental risks in safety studies

On-site, it is important that environmental impact in safety studies be properly assessed, so that the environment can be adequately protected. From 1 January 2021, it is mandatory to assess environmental risks in safety studies. I.e. for all new and existing scenarios that will be assessed from 1 January 2021. An implementation plan must also be submitted to CSP; the plan must clarify when the environmental risks in the existing studies have been assessed against the minimum requirements.

A risk graph has been drawn up for Chemelot, whereby the environmental impact is in line with Seveso III legislation. This risk graph is accessible via the Sitech Practice RA-01. This practice is based on the HAZOP method. An equivalent alternative based on other safety study methods (such as LOPA) is also possible, subject to prior approval by CSP.

It is mandatory to protect against environmental risks in the same way as safety risks. The toughest classification counts. The same guidelines apply for the urgency and prioritization of tackling insufficiently secured scenarios as for safety scenarios.

CSP is charged with overseeing the implementation and compliance with the use of the environmental risk graph.

Contents

General

Notifications

Soil and site planning

Infrastructure

SHE

Permits (governmental)

Security

Emergencies

Shutdown and start-up programmes



## 5.22 Safety Fundamentals Process

At the Chemelot site, the application of four Process Safety Fundamentals (PSFs) is mandatory for primary site residents. Process Safety Fundamentals are developed by the European Process Safety Centre (EPSC), and concern operational practices that are critical for good process safety performance. The four PSFs that are mandatory on the Chemelot site concern methods that are expected to have the greatest positive impact on process safety performance specifically for Chemelot:

1. Check the pipeline before commissioning — Walk the line
2. Never leave an open drain
3. Check for leaks after maintenance and before start-up
4. Operate within safe limits

See also the Best Practice — Process Safety Fundamentals Chemelot Site, which contains additional information.

## 5.23 Process Safety Plan

Every primary site resident is obliged to draw up a Process Safety Plan for all installations and to review it at least once a year. In this plan, the site resident indicates which process safety studies the site resident intends to carry out in the next five years, and the site resident assesses the added value of the implementation of other Process Safety Fundamentals. A [Guidance Document](#) is available for drawing up a Process Safety Plan; it describes the requirements that a Process Safety Plan must meet. The Process Safety Plan must be made available to CSP for review upon request.

## 5.24 Smoking policy

Smoking, both indoors and outdoors, is not permitted throughout the Chemelot site. Effective date 01/04/2022.

Contents

General

Notifications

Soil and site planning

Infrastructure

SHE

Permits (governmental)

Security

Emergencies

Shutdown and start-up programmes



## Chapter 6

### 6.1 General

This chapter describes the Site Rules linked to permits granted by government agencies at site level. These permits are:

Permit	Legislation	Responsibility	Competent authority
All-in-one Permit for Physical Aspects Chemelot Site	Environmental Licensing (General Provision) Bill	CSP B.V.	Province of Limburg (PL)
Emission trading permit (Greenhouse gases)	Environmental Management Act	CSP B.V.	Netherlands Emissions Authority (NEA)
Permit for activities and work involving radioactive substances	Nuclear Energy Act	CSP B.V.	Ministry I&W
Water permit	Water Act	IAZI – B.V.	Roer and Overmaas Water Authority
Soil decontamination action plan, DSM Geleen and Stein	Soil Protection Act	DSM Nederland BV	Province of Limburg (PL)
Groundwater extraction permit	Groundwater Act	DSM Nederland BV	Province of Limburg (PL)

### 6.2 All-in-one Permit for Physical Aspects Chemelot Site

#### 6.2.1 General

Primary site users must satisfy:

1. the general site requirements of the All-in-one Permit for Physical Aspects Chemelot site, including the permit application;
2. the plant-specific regulations of the All-in-one Permit for Physical Aspects sub-permit granted to the primary site users, including the permit application.
3. In the event of modifications, CSP's MOC process must be completed according to the procedure in the CSP BV management system (on the intranet) and the CSP BV management system annex document.

Primary site users' obligations are set out in the Chemelot Site Permit B.V. Management Handbook and the CSP B.V management system.

#### 6.2.2 Emissions to atmosphere

- Emissions exceeding the permit conditions in the All-in-one Permit for Physical Aspects sub-permit of the plant must be reported using the "[Meldingsformulier overschrijding luchtemissies t.b.v. provincie Limburg](#)" (Form for reporting air emissions exceeding the permit conditions to the Province of Limburg). The procedure for reporting abnormal occurrences also applies (see [chapter 2](#))
- Processing of this notification is carried out by and in consultation with CSP B.V.
- The primary site users must as soon as possible take adequate measures to ensure that the environmental impact of large-scale emissions is minimized.



- The primary site users must ensure that the causes of any emission are rectified as speedily as possible.
- Clear instructions must be in place informing staff how to deal with an unexpected release which might cause air pollution.
- Also because this is a statutory requirement, CSP B.V. has an emission accounting system in which up-to-date information is recorded on the components emitted from installations of sub-permit holders.  
CSP B.V. complies with this requirement through management of the Format Air database. The required air emission data for each individual plant must annually be supplied by the holders of sub-permits, in which the air emissions are included. Use is to be made of a format to be provided by CSP B.V.

### 6.2.3 Noise monitoring system / demolition of buildings and installations

In conformity with the all-in-one permit for physical aspects, CSP B.V. has a noise monitoring system in place to provide insight into the total permitted noise zone, the actual noise load and the remaining noise scope.

The acoustic consequences of objects to be built on the site are automatically mapped in the noise monitoring system via the permit application procedure.

When (parts of) buildings and installations on the site are to be demolished, the site user responsible for demolition must inform CSP B.V. so as to enable mapping of the acoustic consequences of demolition in the noise monitoring system.

This is particularly important if the buildings and installations concerned have a shielding effect for noise emitted to the surroundings; in case of doubt CSP B.V. is to be consulted.

### 6.2.4 Waste substances

- The Environmental Permit of the Chemelot Site states that CSP B.V. is responsible for registering all waste that leaves the Chemelot Site.  
The registration obligation relates to maintaining a register of wastes / waste streams presented to external processors, in order to comply with the relevant statutory rules and to have adequate basic information for the legally required Annual Environmental Report (MJV). The registration obligation applies to all wastes / waste streams, except for soil that does not leave the Chemelot Site, as well as the legally excluded categories of nuclear waste, radioactive waste, explosives and cadavers.
- Pursuant to the relevant CSP permit obligations, information on all wastes to be transported to external waste processing companies by individual site residents must be provided to CSP to meet the general registration obligation.  
This registration obligation not only applies to self-produced wastes, but also to wastes and waste streams released during all activities to be performed by third parties on behalf of a site resident (infrastructural projects, cleaning work, sandblasting, etc.). In this case, it must be clearly stated who the actual owner is (always a site user) of the wastes / waste streams in question.  
The registration data for the previous year must be submitted to the CSP Secretary's Office before 1 February, in accordance with the format laid down in the E-MJV / EPTR Directive. For further information about this, please contact the CSP Office at [secretariaat.csp@chemelot.nl](mailto:secretariaat.csp@chemelot.nl).  
The site user itself decides which external waste processor it uses to process its wastes / waste streams. The waste processor in question must have the right environmental permits. Working with an accredited waste processor does not release the site user from its registration obligation towards CSP B.V.

Contents

General

Notifications

Soil and site planning

Infrastructure

SHE

Permits (governmental)

Security

Emergencies

Shutdown and start-up programmes



### 6.3 Greenhouse gases emission permit

Under the Environmental Management Act (section 16), a number of primary site users (DSM, Arlanxeo, OCI, SABIC and USG) on the Chemelot site must participate in the Greenhouse gases emission permit.

This permit has been granted to CSP B.V. by the Netherlands Emission Authority (NEA, a department of I&W, the Netherlands Ministry of Infrastructure and Waterworks).

The relevant primary site users must observe the rules and regulations arising from the emission permit as well as the rules and regulations linked to the applicable monitoring plans and protocols. Enforcement of the permit conditions, including the applicable monitoring plans and protocols, takes place by the NEA. Verification of the reported figures takes place by an external verification agency on the instructions of CSP B.V. The management of CSP B.V. is responsible for overall management of the emission permit (permit, monitoring, emission rights register, enforcement and supervision).

On behalf of the management of CSP B.V. the activities relating to permits, monitoring, enforcement and supervision are coordinated by the Chemelot Site Emission Permit Management Committee. The Emission Rights Register is managed by the Chemelot Site Trading Group, with USG as supervising party.

Enforcement and inspection visits by government agencies take place in the presence of a member of the above committee (preferably the Officer Permit Emission Trading DMC SHE).

Each company site that is subject to the emissions trading conditions must inform the NEA of index figure measurements, calibration measurements, verification measurements and certain changes. On behalf of CSP B.V. the Officer Permit Emission Trading handles the contacts with the NEA. The obligation set out in the above applies to all primary site users and the relevant data are to be reported to the Officer Permit Emission Trading using the "[Meldingsformulier Incidenten en afwijkingen broeikasgassen-emissievergunning Chemelot](#)" (Notification form for incidents and deviations relating to the Chemelot Greenhouse gases emission permit). Notification of measurements such as the index figure measurements, verification measurements and calibration measurements shall take place at the latest three weeks before the start of the measurements. Changes to the monitoring method shall be notified within three days of the incident.

### 6.4 Complex permit Nuclear energy act

#### 6.4.1 Complex permit

##### 6.4.1.1 Introduction

- The Dutch government has granted CSP B.V. a so-called complex permit under the Nuclear Energy Act, covering the use of (natural) radioactive substances and X-ray equipment by all primary site users on the Chemelot site. All applicable primary site users are under an obligation to be included in the complex permit covering the entire site and to be included in the registry of sub-permit holders.
- The management of CSP B.V. has entrusted supervision of the use of radioactive substances and/or X-ray equipment covered by the complex permit to the Radioactive Substances Management Committee (hereafter referred to as RAS Management).
- Contact data for RAS Management/Complex permit:  
Jack Konings  
046 4761406 or 06 22559537  
jack.konings@sitech.nl

##### 6.4.1.2 Modification of applications

- For every new application or modification of an existing application of a radioactive source or X-ray device the area manager requires permission from RAS Management. The application (or modified application) may be implemented only following permission in writing of RAS Management and must be in accordance with the conditions set down by RAS Management.

Contents

General

Notifications

Soil and site planning

Infrastructure

SHE

Permits (governmental)

Security

Emergencies

Shutdown and start-up programmes



#### 6.4.1.3 Notifications

- RAS Management is to be notified immediately of any irregularities with respect to compliance with the permit conditions. This can be done by email or by phone, followed as soon as possible by written confirmation, preferably using the "[Meldingsformulier onregelmatigheid radioactieve stoffen complexvergunning KEW](#)" (Notification form for irregularities involving radioactive material with respect to the complex permit under the Nuclear Energy Act).

#### 6.4.1.4 Removal from site

- The removal from the site of radioactive substances, of equipment, apparatus, measuring instruments, ionization smoke detectors (including exempted detectors) that include radioactive sources, and of X-ray equipment, etc. must take place in consultation with RAS Management.

#### 6.4.1.5 Ionizing radiation: Instruction

- Wherever radioactive sources and/or X-ray machines are used, the responsible line managers of the site user must have been instructed by RAS Control in relation to the regulations applying to ionizing radiation. Employees operating equipment incorporating radioactive sources and/or X-ray machines must also have been instructed by RAS Control in the use of such equipment.

#### 6.4.2 External companies

- External companies carrying out work involving radioactive substances (for example RTD, AVN, ..) must have their own valid permit under the Nuclear Energy Act, issued by the Dutch government.
- Supervision of safe execution of activities by external companies is the responsibility of the area manager concerned. Each area manager must regularly test the safety performance of external companies, or have this performance tested, for which the assistance of a radiation expert (for instance of the RAS group) can be sought.
- Companies wishing to set up a storeroom for radioactive substances on the Chemelot Site (e.g. when a TA takes place) in conformity with their own permit under the Nuclear Energy Act can do so only after obtaining the RAS Control Committee's written approval. This storeroom can be used exclusively for the Chemelot Site (no transit of radioactive substances being allowed, see H 5.9.2) and must comply with applicable legislation.

#### 6.4.3 Slag wool

- When carrying out maintenance or demolition work on installations and buildings built before 1965 it should be realized that radioactive slag wool may be present. Work involving slag wool and the disposal of slag wool are subject to legal requirements. RAS Management is to be notified immediately of the (suspected) presence of slag wool.

#### 6.4.4 Ionization smoke detectors

- The use of ionization smoke detectors (smoke detectors containing radioactive substances) for which a permit is needed is not covered by the complex permit. The user must apply for a separate permit for such use.

Contents

General

Notifications

Soil and site  
planning

Infrastructure

SHE

Permits  
(government-  
tal)

Security

Emergencies

Shutdown and  
start-up  
programmes



## 6.5 Water permit (waste water discharge permit)

- The specific part-flow standards set out in the water permit (waste water discharge permit) for the site user in question may not be exceeded.
- Provisions for treatment and sampling of part-flows must function effectively, be in sound condition and be carefully operated and maintained. Logbooks or equivalent systems must be maintained in which as a minimum the following data must be recorded:
  - date, nature and duration of the maintenance activities
  - external company and/or staff member carrying out the work
  - date, nature and duration of disruptions

The relevant logbooks must be retained for 5 years as a minimum.

- It is not allowed to
  - discharge solids into one of the sewer systems.
  - discharge process water into the clean water sewer.
- The following stipulations apply in the event of an irregular pattern of discharges:
  - *Unforeseeable irregularities in discharge patterns as a consequence of failures or emergencies:*  
These must be reported immediately by telephone to the IAZI Control Room (tel. 046-47 64797) and confirmed in writing within 15 minutes using the "[Meldingsformulier afwijkende afvalwaterlozing](#)" (Irregular Waste Water Discharge Notification Form). Discharges of waste water having a temperature of more than 40°C are considered to be an 'irregular pattern of discharges'.
  - *Short-term planned deviations from the discharge pattern* (e.g. flushing and cleaning activities):  
These must be reported by telephone to the IAZI Control Room point prior to the discharge (tel. 046-47 64797). The IAZI operator indicates whether and under what conditions the discharge is permitted. The notification must be confirmed in writing within 15 minutes using the "[Meldingsformulier afwijkende afvalwaterlozing](#)" (Irregular Wastewater Discharge Notification Form).
  - *Planned deviation from discharge pattern (for example planned shutdowns):*  
The required actions and control measures must be discussed with Sitech Services B.V./IAZI ([contact.iazi@sitech.nl](mailto:contact.iazi@sitech.nl)) at least 4 weeks in advance.
  - *New substances not previously notified:*  
These discharges must be approved in advance by Sitech Services B.V./IAZI ([contact.iazi@sitech.nl](mailto:contact.iazi@sitech.nl))
  - *Exceeding of discharge levels for plant with a part flow standard in the Water permit (waste water discharge permit) under the Water Act:*  
The site user in question reports this exceeding of standards to IAZI B.V. using the form "[Formulier overschrijding lozingsvergunning Chemelot](#)" (Notification form for exceeding of discharge permit limits at Chemelot), and IAZI B.V. then immediately reports the matter to Waterschap Roer en Overmaas (Water Authority).
- In case of a major disruption of the IAZI plant or an emergency on the site involving a threat of the permit conditions being exceeded, the IAZI shutdown programme guideline will come into effect, if necessary (see [chapter 9](#), Shutdown and start-up programmes).

## 6.6 Soil cleanup action plan, DSM Geleen and Stein

- Site users must lend their cooperation to the implementation of the measures described in the action plan, in accordance with their lease agreement.

## 6.7 Groundwater extraction permit

- Extraction of groundwater by site users is not allowed except when permission has been obtained from DSM NL B.V..

Contents

General

Notifications

Soil and site planning

Infrastructure

SHE

Permits (governmental)

Security

Emergencies

Shutdown and start-up programmes



## 6.8 Nature Conservancy Permit

In respect of the Chemelot facility, the Provincial Executive of Limburg has granted a permit for the requested activities to CSP B.V. in the context of the Nature Conservation Act (WNB). All companies that are (or will be) based at the Chemelot facility and carry out business activities there must comply with the requirements laid down in this permit.

The Nature Conservation Act aims to protect species and Natura 2000 areas. It governs aspects including the deposition of nitrogen and sulphur-containing components via the air and the discharge of components via water.

The permit is linked to generally applicable regulations. These regulations are included in the "*Handboek Beheer Vergunning Wet Natuurbescherming*" (Manual for the Administration of Nature Conservation Act Permits). This manual is available on the intranet. All users of this permit must comply with these regulations and, where appropriate, with any additional regulations.

This WNB permit applies in addition to the all-in-one permit and the water permit for the Chemelot facility. An activity can only take place if a permit has been granted and the requirements of all three permits have been met.

Contents

General

Notifications

Soil and site  
planning

Infrastructure

SHE

Permits  
(government-  
tal)

Security

Emergencies

Shutdown and  
start-up  
programmes



## 7. Security

### 7.1 General

The Security Site Rules apply within the outside fence.

### 7.2 Access rules for persons

#### 7.2.1 Site passes

- Access to the Chemelot site is granted exclusively to persons in possession of a valid site pass.
- During the stay on the Chemelot Site the site pass must be worn visibly, unless this presents a safety risk during the work. The pass must be produced on request.
- A site pass is withdrawn if it is found that:
  - the conditions for provision of the site pass are no longer met
  - it is misused
  - modifications are carried out or attempted.
- All site passes remain the property of the Park Services Security department.
- The site user's personnel department must provide the Park Services Security department with a monthly statement of all employees whose employment has been terminated or who have taken early retirement, so that their site passes can be blocked.
- Management of external companies must provide the Park Services Security department with a monthly statement of all staff who have completed their work on the Chemelot site or who are no longer employed by them, so that the relevant site passes can be blocked. The site passes in question should be handed in to the Park Services Security department.

Contents

General

Notifications

Soil and site  
planning

Infrastructure

SHE

Permits  
(government-  
tal)

Security

Emergencies

Shutdown and  
start-up  
programmes



Categories of site passes:

Site pass	Format	Color	Period of validity <sup>1)</sup>
<b>Site users</b> (Site user pass)	Name and logo of site user <sup>2)</sup>	Site user company color	3 years
<b>External companies</b>  - <b>Contractors (mechanical, electrical, process control, civil engineering, ATD)</b>  - <b>Suppliers</b>  - <b>Hauliers</b>  - <b>Miscellaneous</b> (Contractor pass)	Name + Chemelot logo	Red	a) permanent site staff of in-house external companies <sup>3)</sup> : 3 years b) employees used for project/shutdown activities: for duration of project/shutdown c) employees not covered by a) and b) and who are present with some degree of regularity over the year: ≤ 3 years
<b>Visitors</b> (Visitor pass)	Name + Chemelot logo	Green or company color	not applicable

- 1) The site pass is automatically blocked in the AEOS access registration system when the pass holder has not been on the site for more than six months. In such cases a new site access instruction session has to be attended.
- 2) If the site user does not wish to use their own name and logo, then Chemelot Site name + logo + color
- 3) "Permanent site staff" is taken to mean staff carrying out work very frequently on the Chemelot site ( $\geq 100$  x per year = on average at least 2 days a week). In addition, there must be an employment contract with the external company in question.  
"In-house external companies" is taken to mean:
  - contractors (mechanical, electrical, process control, civil engineering, ATD) permanently carrying out work.
  - contract hauliers with a fixed staff of drivers permanently engaged in transporting site users' products
  - service providers since long established on the Chemelot site or frequently present on the site
  - other situations, to be determined by the owner/Security Operational Board delegate.

Contents

General

Notifications

Soil and site planning

Infrastructure

SHE

Permits (governmental)

Security

Emergencies

Shutdown and start-up programmes



Special categories:

#### 1. Site user pass

Employees that are recorded in the site user's personnel system using the same method as for own staff qualify for a site user pass.

#### 2. Special site pass

Site user employees who are normally working at another site but who frequently need to be present on the Chemelot site may be provided with a special site pass for a maximum of 1 year. Authorized persons should be nominated by the site users who can grant permission for this. Applications are made by means of the "[Aanvraagformulier voor bijzondere bedrijfspas](#)" ('*Special site pass application form*').

#### 7.2.2 Day passes

- These may be provided to:
  - Site user and external company personnel at the site entrance who are without their permanent site pass.
  - External company personnel if they carry out activities for only a limited number of days (5 at most). The further conditions are as stated in 7.2.6. If the external company employee in question does not have available the proof of identity specified in 7.2.6, a valid Dutch driving licence will be accepted, on the understanding that, if the person involved is (or is suspected to be) of foreign nationality, the security officer is entitled to require production of a valid Dutch passport, a local authority or European identity card or a residence permit.
  - Drivers of freight vehicles. As well as valid proof of identity these drivers must also be able to produce a valid HGV licence.

See also: 7.2.7.

#### 7.2.3 Visitor pass

- Visitor passes are meant for:
  - Persons visiting site users;
  - Persons visiting contractors if
    - such visits are related to work commissioned by a site user;
    - no work is carried out (this does not include participation in a meeting, for example);
  - Persons visiting other external companies with a permanent presence on the Chemelot site which work not only for site users but also for third parties outside the Chemelot site (for instance external companies on Campus Research).
- Visitors have to prove their identity. Visitors do not have to attend a site access instruction session. For accompaniment of visitors, see 7.2.8.

#### 7.2.4 Access records

- Card readers are used for automatic individual access control and recording.
- All occupants of vehicles with the exception of the driver must leave the vehicle before the entrance/exit and use the card readers provided for pedestrians.

#### 7.2.5 Application for site user pass

- Applications are made by means of the "[Aanmeldingsformulier Site user-pas](#)" (Site user pass application form), signed by the relevant site user's personnel department. The personnel department is responsible for identity checks as required for employers under the Compulsory Identification Act.

Contents

General

Notifications

Soil and site planning

Infrastructure

SHE

Permits (governmental)

Security

Emergencies

Shutdown and start-up programmes



#### 7.2.6. Application for external company site pass

- Applications are made by means of the "[Contractor ID Card application form](#) / [Employer statement for ID Card](#) , with the signatures of the relevant employer and an Authorized Person.
- Further conditions to be met for obtaining a pass:
  - Dutch personnel of external companies:
    - A valid *proof of identity* (passport, local authority or European identity card)
  - Foreign personnel of external companies:
    - A valid *proof of identity* (passport, local authority or European identity card) or a residence permit for foreign employees resident in the Netherlands.
    - *Employment permit* if the employee is not resident in the Netherlands and is of another nationality than that of one of the EU countries or that of Switzerland, Norway, Iceland and Liechtenstein (Foreign Nationals Employment Act).
    - *Residence permit*, with permission to work if the employee is resident in the Netherlands and is of another nationality than that of one of the EU countries or that of Switzerland, Norway, Iceland and Liechtenstein (Aliens Act).
- Procedure for appointment of Authorized Persons: see regulation "[Persons authorized to grant external company passes](#)".

#### 7.2.7 Issuing company passes

- Company passes are issued at the Central Company Passes desk:
  - Gate 5, Kerenshofweg 101.
  - Opening hours: Weekdays from 07.00 to 11.30 and from 12.00 to 14.45
- Company personnel must present the documents stated under [paragraph 7.2.6](#) at the Central Company Passes desk.
- An individual shall receive a company pass (permanent pass or day pass) on condition that he/she has followed the site access instructions and has successfully completed the associated test. See [paragraph 5.3.1](#).

Drivers of freight vehicles who hold a day pass will also receive the Drivers' Safety Instructions (safety instructions chart) and a map.

#### 7.2.8 Accompaniment of visitors

- Visitors must be accompanied on the Chemelot site by a staff member from the host company who holds a valid site pass and is familiar with the local regulations.

#### 7.2.9 Accompaniment of day pass drivers in the event of language problems

- If a driver fails to gain an adequate score in the test on the "mime" safety film despite a repeat attempt, the receiving department must accompany the driver to the loading/unloading station and vice versa, unless this department decides not to admit the driver.

#### 7.2.10 Refusal of permission to enter the Chemelot site

Admission will be refused to persons who are:

- less than 16 years of age, unless they have an exemption from Park Services Security department
- apparently under the influence of alcohol, narcotics or similar substances, see also [paragraph 5.11](#)
- prohibited from the Chemelot site on the grounds of breach of the regulations
- unable to demonstrate that their presence is related to the interests of any of the site users

#### 7.2.11 Admission without site pass in exceptional situations

- Specific agreements may be made with the Park Services Security for open days, large-scale company visits, etc.  
The minimum age for admission to the site without site pass in special situations is 10 years.

Contents

General

Notifications

Soil and site planning

Infrastructure

SHE

Permits (governmental)

Security

Emergencies

Shutdown and start-up programmes



### 7.3 Access rules for vehicles

#### 7.3.1 Permitted vehicles

- Freight vehicles used to deliver and/or collect materials, goods, raw materials and auxiliary materials, end products, etc.
- Vehicles of external companies, recognizable as such by means of permanent logos or lettering legible at distance.
- Vehicles of external companies, private vehicles and motor cycles the driver of which holds a Chemelot vehicle access permit.
- Bicycles and mopeds.

#### 7.3.2 Chemelot vehicle access permit

- Chemelot vehicle access permits may be granted only by site users (working on the assumption of restrictive admission of vehicles).
- Normally a limited number of general Chemelot vehicle access permits in the company name will be issued to site users and qualifying external companies.  
The Operational Board decides every five years on the number of general Chemelot vehicle access permits to be provided for site users and qualifying external companies. This will be based on an overview to be provided by Park Services Security department.
- Personal Chemelot vehicle access permits are provided only in limited quantities, and may be allocated only by plant managers and equivalent officers, subject to the following criteria:
  - mobility on the Chemelot site is required in connection with the job to be performed
  - medical indication (on recommendation of company doctor, stating a period of validity)
- The "[Aanvraagformulier Toegangspas Voertuigen](#)" (Chemelot vehicle access application form) must be used for applications for vehicle access permits (general as well as personal vehicle access permits).
- External company management must return general vehicle access permits to Park Services Security department upon completion of activities, and personal vehicle access permits upon termination of the employment

#### 7.3.3 Accompaniment of vehicles higher than 4 metres

- Vehicles which trigger the level detectors at the freight vehicle entrances and which cannot be reduced in height will be admitted only with the permission of the commissioning department, which must also accompany the vehicle.

Contents

General

Notifications

Soil and site  
planning

Infrastructure

SHE

Permits  
(government-  
tal)

Security

Emergencies

Shutdown and  
start-up  
programmes



#### 7.4 Supply and removal of goods

Documents required for supply to and removal from the site

Goods category	Logistic characterization	Documents required for delivery	Documents required for removal	Notes
End products	One-off removal		National/international freight documents	
Raw and auxiliary materials	One-off supply	National/international freight documents		
Waste substances	One-off removal		Permit to remove goods*	
Technical and facility materials and goods	One-off supply or removal	National/international freight documents	Permit to remove goods*	Also applies to removal of surplus goods by staff
Technical and facility materials and goods	Frequent supply and removal	Supply and removal list		- Goods to be properly described within relevant category or categories on the list - Authorized users to be stated on the list - For specific vehicle (registration plate)
Goods belonging to external companies (or their employees) on a day pass or visitors on a visitor's pass	One-off supply and removal	Goods digitally recorded in the access registration system		-
Large-scale projects	Project-bound	Permit to remove goods* or Supply and removal list		Tailor-made solution via Security PS (to be initiated via site user/site occupant)
Goods belonging to an external company that are permanently marked with that company's logo	Frequent supply and removal to and from site users and external companies	None		
Personal equipment: Laptops, tablets, mobile phones, photographic film and video equipment, beamers, etc.	Frequent or one-off supply or removal	None		-

\* Signed and stamped by person authorized to grant permit to remove goods



Applying for and issuing of documents

Document	Application to be made to/Document issued by	Notes
Permit to remove goods	Person authorized to grant a permit to remove goods	For each site user/site occupant there is a fixed number of persons authorized to grant a permit to remove goods (coordinated by Security PS)
Supply and removal list	Security Park Services	These lists can be obtained from Security Park Services by completing the “ <a href="#">Aan- en afvoerlijst</a> ” (Supply and Removal List Form) N.B.: The Supply and Removal List Form for site users/site occupants is to be completed by a person authorized to grant a permit to remove goods of the site user/site occupant concerned

\* Appointed within site users and external companies.



### 7.5. Searches

- Anyone entering or leaving the Chemelot site may be searched.
- Searches in principle take place at all entrances. Except in exceptional situations this will take place on a random basis.
- At the request of the security officer tasked with searches the carrier must display any goods carried by opening their cargo compartment or unpacking any bags carried.
- Hand baggage searches may at the request of the person involved take place in an appropriate room offering adequate privacy.
- All persons are to lend their full cooperation when a search is requested.
- Targeted searches may take place in the context of an investigation following reports of suspected theft or misappropriation of funds.

### 7.6 Filming and photography

- It's forbidden to photograph, film or produce video in the plant or of installations in the plant, prohibited unless exemption has been granted by the area manager. In case of doubt please contact your area manager.  
The [form "Filmen en fotograferen op de Chemelot site"](#) (Filming and photography on the Chemelot site), being a best practice, can be used when granting such exemptions.

### 7.7 Police involvement

- Where criminal offences are discovered or suspected the site user may independently call in the regional police force. The site user informs the Park Services Central Control Room of the arrival and presence of regional police on the Chemelot site (also to facilitate proper admission of police officers to the site).
- The site user may also call in the Park Services Security department directly in order to make use of their expertise and their contacts with the regional police force.

### 7.8 Investigating officers and government officials

- Investigating officers and officials from government agencies must identify themselves as such at the site entrance. They need not then identify themselves with a general proof of identity (passport, local authority or European proof of identity). They will receive a visitor pass on each occasion.
- These officials must comply with the code of conduct and safety rules applicable on the Chemelot site.
- Investigating officers may be accompanied at their request by site user staff members.
- Government officials will be accompanied by staff members from the host company during their visit to the Chemelot site.

Contents

General

Notifications

Soil and site planning

Infrastructure

SHE

Permits (governmental)

Security

Emergencies

Shutdown and start-up programmes



## 8. EMERGENCIES

Report Incidents immediately to the Central Control Room Park Services via **alarm number 046-47 66 666**.  
Other reports to the Central Control Room Park Services via 046-47 65900 NOT during incidents.

### 8.1 General

The competent authority has designated the Chemelot Site as a single establishment required to comply with the BRZO. In accordance with BRZO regulations, the Site has a Safety Report in accordance with the Major Accidents (Risks) Decree ('Besluit Risico Zware Ongevallen' or BRZO). The individual companies/plants must act within the scope of the permit issued pursuant to the BRZO. This is periodically verified on behalf of the competent authority. The obligation to have a Company Contingency Plan ('Bedrijfsnoodplan' or BNP) for the Chemelot site arises from the Major Accidents (Risks) Decree (BRZO). The Board of CSP B.V. has final responsibility for the BNP and its implementation. The plants must ensure that their emergency response organizations are in line with this joint company contingency plan. Sitech Park Services B.V. is responsible for the actual implementation of the BNP on behalf of the Board of CSP B.V.

Pursuant to Section 31 of the Security Regions Act, the management of the security region has designated Chemelot as a site requiring a company fire brigade, due to the special danger that may occur in the event of a fire or accident at the establishment. The security region has set requirements for the nature and scale of the company fire brigade and the level of the equipment and competence. This is periodically verified. The company fire brigade is housed at Sitech Park Services. The emergency response plan ('rampenbestrijdingsplan' or RBP) arises from Section 17 of the Security Regions Act. This is a government plan prepared and adopted under the responsibility of the security region's management for special high-risk objects. The security region has provided this plan in collaboration with Chemelot.

Contents

General

Notifications

Soil and site  
planning

Infrastructure

SHE

Permits  
(government-  
tal)

Security

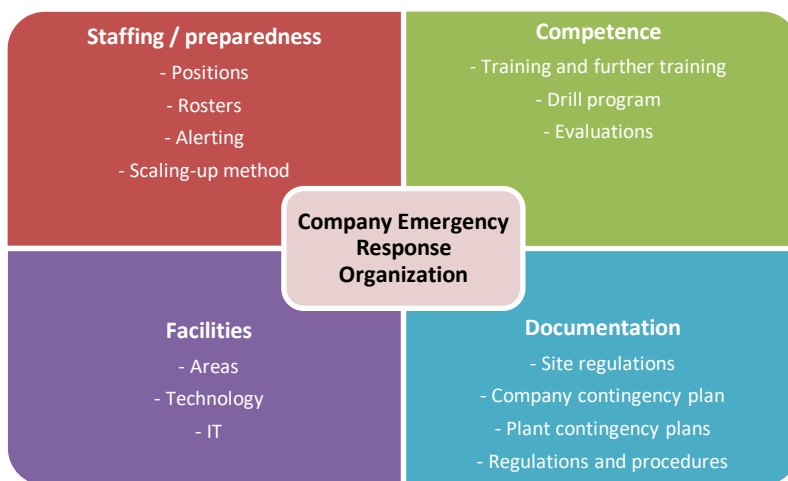
Emergencies

Shutdown and  
start-up  
programmes

## 8.2 Set-up of the Company Emergency Response Organization

To be able to act adequately and Site-wide in the event of an (imminent) incident, a joint company emergency response organization has been set up. The company emergency response organization takes measures to control and limit the effects of an (imminent) emergency situation. This concerns the safety of staff, visitors and residents, minimizing damage to the environment and goods, and the continuity of the production processes. That is why the crisis team and the emergency response services of the company emergency response organization collaborate closely with the government and the emergency response organizations of the plant on an operational and administrative level.

To guarantee the functioning of the company emergency response organization, the following matters are arranged and maintained:



The functioning of the company emergency response organization and the collaboration with plants and government are described here in Section 8 of the Site Regulations, the Company Contingency Plan (8.3) and a Set of Regulations and Instructions (8.4).

- Section 8 here describes what to do in the event of an (imminent) emergency. This guarantees the procedure for the company emergency response organization and plants in the Site Regulations and makes it binding for the Site users, unless indicated otherwise.
- The company contingency plan (8.3) specifies the procedure in terms of organization, collaboration structure (GRIP) and emergency response processes. In a way, the document forms the framework for the procedure (WHAT?).
- The specification of the procedure (HOW?) is laid down in a series of regulations and instructions (8.4).

Contents

General

Notifications

Soil and site planning

Infrastructure

SHE

Permits (governmental)

Security

Emergencies

Shutdown and start-up programmes

### 8.3 Company Contingency Plan document

The company contingency plan describes the collective activities of the Chemelot site users regarding the company emergency response organization. This plan describes how the crisis organization is set up (GRIP levels) for various types of incidents and stages of incident progress. Specific attention is paid to the processes performed by the company emergency response organization:

Statutory processes	Other processes
Alerting and scaling up	Ending the emergency situation
Clearing out and evacuating	Aftercare
Setting up emergency response organization and network	Controlling and tackling other (emergency) situations
Emergency response and operational control	Measuring hazardous substances
Informing and collaborating with external emergency response services	Managing, staffing and using Action Center + other BNO roles, such as liaisons, for external bodies
Limiting damage	Starting up business continuity
Logistics and technical support	
Informing surrounding area	
Providing information and accommodating staff and relations	
Communicating with media and external stakeholders	
External and internal formalities	
Modifying business processes	

The company contingency plan is binding for all Site users, unless explicitly stated otherwise. The company contingency plan is an internal document, available to Site users and (upon request) to contractors. The document, regulations and instructions are published on [extranet.chemelot.com](http://extranet.chemelot.com)

Contents

General

Notifications

Soil and site planning

Infrastructure

SHE

Permits (governmental)

Security

Emergencies

Shutdown and start-up programmes

## 8.4 Regulations, Instructions and Best Practices

Concrete guidelines on how to act to prevent, limit and tackle emergencies are provided in regulations and instructions. The Best Practices can also be used. These are included in the Site Regulations as a reference framework/recommendation.

The regulations and instructions numbered 8Ax specify the obligations for plants at Chemelot for setting up the connection to the central BNO organization. The regulations and instructions numbered 8Bx specify the way in which the central BNO organization is organized and functions.

### 8A1 Regulation on Plant Contingency Plan Format

In their Plant Contingency Plan, Site users describe the preparations of the plant, institute, facility for any disruption to the business processes and incidents. The description is the action perspective for the Site user and contains relevant information for the connection to and the action perspective of the company emergency response organization (Action Center, Control Room and Operational services). The Plant Contingency Plan should therefore be in line with the company contingency plan. This document provides a format and describes the control process.

### 8A2 Regulation on Property Cards

Park Services prepares property cards to ensure that action can be taken safely and effectively in the event of an incident. Property cards contain information that, in the opinion of the company fire brigade, is relevant to repressive action in the event of an incident in the relevant property (building, facility, storage, etc.). The property card is also actively used during drills. The information is supplied by the site users and/or contractor. This document describes what information is recorded and how the process of supplying and processing information is carried out.

### 8A3 Regulation on Hazardous Substances Information

Site users are required to document the (possible) presence of hazardous substances. This information must be up-to-date and available to the company emergency response organization in the event of an incident. This document describes what information is relevant and how the information is shared.

### 8A4 Regulation on Risk information for new developments, changes to (process) facilities and modifications to buildings and infrastructure

To ensure preventive fire safety and safe and effective repressional deployment in the event of an incident, there must be active communication between the Site users and Park Services (company fire brigade and security) about risks, facilities and measures. This document describes what information and situations are relevant and how the information is shared.

### 8A5 Regulation on lists of experts

Being able to reach contacts of Site users and contractors in time is one of the critical success factors for the functioning of the company emergency response organization. Details of contacts and availability are recorded in lists of experts (by Site users and contractors). This document describes what details are relevant and with whom the details have to be shared.

Contents

General

Notifications

Soil and site planning

Infrastructure

SHE

Permits (governmental)

Security

Emergencies

Shutdown and start-up programmes

#### 8B1 Regulation on Safeguarding staffing, competence and arrival time of company emergency response organization

The timely availability of officers is one of the critical success factors for the functioning of the company emergency response organization. The Site users jointly take care of the appointments. This document describes how that responsibility is assigned for the positions at the Action Center and the Site representatives in the government's crisis teams (ROT, GBT & RBT). This document describes what kinds of services there are and how the responsibility for safeguarding them is assigned.

#### 8B2 Regulation on Training Plan for Company Emergency Response Organization (incl. CvD)

Members of the company emergency response organization must be properly prepared for their tasks. This is done by means of training and periodic drills. This regulation describes the training procedure.

#### 8B3 Regulation on Drill Plan for Company Emergency Response Organization (incl. plants)

Members of the company emergency response organization must be properly prepared for their tasks during incidents. This is done by means of training and periodic drills. This document describes the drill process.

#### 8B4 Regulation on Evaluation of Company Emergency Response Organization Action in the event of an incident

The adequate functioning of the Company Emergency Response Organization in the event of an incident is essential to the company and institutes at Chemelot, residents, employees and visitors. Practical experience gained must be evaluated to improve the handling of future incidents (even more) and to incorporate any learning points regarding the prevention and limitation of incidents in the business processes. This document describes the evaluation process.

#### 8B5 Regulation on OSBL fire-fighting water – canal water

The purpose of this regulation is to safeguard an adequate infrastructure, which at the Chemelot site guarantees the availability of sufficient quantities of fire-fighting water to adequately tackle incidents. The basic idea is to have a 2-sided supply for the canal and fire-fighting water networks and a ring structure with blocking valves. Variations (custom solutions) with identical functionality are occasionally possible. This document describes the facilities and explains how the use of the OSBL fire-fighting water facilities should be handled.

#### 8B6 Regulation on ISBL fire-fighting (water) facilities

This document describes the ISBL fire-fighting (water) facilities and safeguards:

- The availability of operating and (possibly) maintenance instructions at Park Services.
- Demonstrable periodic maintenance and testing of the ISBL fire-fighting (water) facilities.

#### 8B7 Regulation on Alerting Staff

In case of imminent danger, users of the Site are alerted to allow them to take themselves to safety. Traffic streams are also regulated to keep people outside of the high-risk area and to create room for the emergency services. The Chemelot Site Safety Instructions are used to inform all users of the site how to act in the event of an alarm.

This document describes the system of klaxon and siren areas, safe escape, assembly and muster points, Reasonably Airtight Spaces (RDR), which must be accessible at all times, and technical signaling measures, as well as the Management of Change procedure for desired modifications.

#### 8B8 Regulation on Technical installation for Alerting of Staff (AB)



This document describes the requirements for the technical installations that jointly take care of the Alerting of Staff. This is a lower limit (basic level). Individual building managers can personally impose stricter requirements. For modifications, please refer to the MOC procedure in regulation 8B7.

#### 8B9 Instructions for Company Emergency Response Organization (BNO)

This document describes on a position level how to act during incidents for the members of the central crisis organization. These instructions are not public for security reasons and are only intended for the members of the BNO.

#### 8B10 Instructions on BNO crisis communication

This document describes the execution of tasks for the information providers of the company emergency response organization (BNO). It describes the structure, the collaborative relationships and the execution of tasks at the individual incident levels (GRIP structure).

#### 8B11 Instructions on communication in the event of unusual incidents

This document clearly records the communication actions of Site users in the event of "unusual incidents", to ensure good proactive information provision to residents in the vicinity of the Site. The document is relevant to (information providers, heads of production, and boards of) all Site users. Unusual incidents are planned and unplanned situations in the production process, which can be observed in the vicinity, for example, in the form of a visual image, smell or noise, which involves communication but for which the company emergency response organization is not set up.

#### 8B12 Instructions on abnormal situations regarding sources of ionizing radiation

This document offers a generic action perspective for reporters of incidents and for Park Services (Company Fire Brigade and Central Control Room). It applies to all site users who perform work (or have it performed) using sources of ionizing radiation.

All regulations and instructions are binding for all Site users, unless explicitly stated otherwise. These internal documents are available to Site users and (upon request) to contractors. The documents are published on [extranet.chemelot.com](http://extranet.chemelot.com)

#### 8B13 Instructions on redeeming plantteams during alarm-situations

#### 8B14 Instructions on evacuation (parts of) Chemelot site during alarm-situations

### **8.5 Supplement to the documents**

#### Training for portable extinguishing equipment

In *production environments* not only containing hose reels, but other portable extinguishing equipment as well, the entire staff should not only follow the initial training, but also repeat instructions at least 1x every 3 years. In *office buildings* not only containing hose reels, but other portable extinguishing equipment as well, only the Company Emergency Response Team members should not only follow the initial training, but also repeat instructions at least once every year.

Contents

General

Notifications

Soil and site  
planning

Infrastructure

SHE

Permits  
(government-  
tal)

Security

Emergencies

Shutdown and  
start-up  
programmes



## 9. SHUTDOWN AND START-UP Programmes

### 9.1 Utility failures

In the event of a utility failure, actions must be taken in accordance with "Afschakel- en opstartvolgorde Utiliies" (Utilities shutdown and start-up sequence), which is included in the [Failure Plan](#), one of the part plans forming the Chemelot Plan for Exceptional Circumstances. This document is held in the Action Centre (ACC - Park Services).

### 9.2 Disruption of IAZI operation or on-site emergency involving a threat of the permit standards being exceeded

In the event of a major disruption of IAZI operation or an on-site emergency that threatens to result in the permit standards being exceeded, action must be taken in conformity with the guideline drawn up for this purpose, which is held in the Action Centre (Alert and Care Center - Park Services).

#### Procedure

- If timely noticed, discharges threatening the operation of the IAZI, and therefore threatening compliance with the permit conditions under the Pollution of Surface Waters Act, are to be buffered in the available retention basins.  
If the emergency capacity (last 10,000 m<sup>3</sup> of the capacity) needs to be used, the head of production / emergency watch is to be consulted.
- Depending on the situation (environmental relevance) a choice must be made between an acceptable relaxation of the permit conditions (in consultation with the authorities) and a reduction in the production capacity on site. The choice will be determined in consultation with the Action Centre leader and the emergency watches.
- The government agencies must agree to a short-term relaxation of the permit conditions. In the case of an extended relaxation of the permit conditions the government agencies must also agree and issue a formal order (a temporary exception order, optionally with reduction measures being imposed).
- The choice of measures to be taken depends on:
  - the degree and nature of the higher-than-permitted values
  - the actual flow rate of the Meuse river
  - the actual contaminant load, flow rate and specific components per plant
  - the actual economic significance for each plant
  - tie-ins with other plants
  - the position of the relevant government agency [Waterschap Roer en Overmaas (Water Authority)]

Contents

General

Notifications

Soil and site  
planning

Infrastructure

SHE

Permits  
(government-  
tal)

Security

Emergencies

Shutdown and  
start-up  
programmes



## Abbreviations

ACC	: Alert and Care Center	Contents
ADR	: Accord européen relatif au transport international des marchandises Dangereuses par Route (European international road transport legislation)	General
AVN	: Association Vinçotte Nuclear	Notifications
BHV	: Emergency Response Worker	
BNP	: Company emergency plan	
BRZO	: Hazards of Major Accidents Decree	
CMPS	: Park Services Central Control Room	
CORT	: Disaster site command	
CSP	: Chemelot Site Permit B.V.	
CvD	: Shift supervisor	
E	: Electrical engineering	
EHBO	: First Aid	
GRIP	: Coordinated Regional Incident Control Procedure	
IAZI	: Integrated Wastewater Purification Plant	Soil and site planning
IBL	: Inside Battery Limits	
I&W	: Infrastructure & Waterworks	
KEW	: Nuclear Energy Act	
LOPC	: Loss of Primary Containment	
LSR	: Life Saving Rules	Infrastructure
MKS	: Environmental complaints system	
MOC	: Management of Change	
MZL	: South Limburg Control Room	
NEA	: Netherlands Emission Authority	
NEN	: Dutch standard	SHE
OBL	: Outside Battery Limits	
OSHA	: (US) Occupational Safety & Health Organization	
OvD	: Duty Officer (company fire brigade)	
PA	: Compressed Air Breathing Apparatus	Permits (governmental)
Pb	: Process control	
PPE	: Personal Protective Equipment	
PGS	: Hazardous substances publications	
PL	: Province of Limburg	
PS	: Park Services	
RAS	: Radio Active Substances	
RBP	: Calamity Control Plan (RampenBestrijdingsPlan)	Security
R-LOD	: Repressive Lines of Defence	
ROT	: Regional Operational Team	
RTD	: X-ray Department	
SDS	: Safety Data Sheet	Emergencies
SV	: Safety Valve	
SQAS	: Safety and Quality Assessment System	
USG	: Utility Support Group	
UN	: United Nations	
VCA	: Contractors SHE Checklist	Shutdown and start-up programmes
SHE	: Safety, Health, Environment	
VLG	: Overland Carriage of Hazardous Substances Regulations	
VNCI	: Dutch Chemical Industry Association	
VNPI	: Netherlands Petroleum Industry Association	
W	: Mechanical engineering	
WABO	: General Act on environmental rulings (Wet Algemene Bepalingen Omgevingsrecht)	
WM	: Environmental Management Act	
WMS	: Chemical Substances Act	



## Overview of regulations and other mandatory documents

Regulations	Section
Determination of areas and appointment of area managers	5.1
Site Work Permit: ▪ Site Work Permit form ▪ The roles involved in the Site Work Permit process	5.5.1
Excavations	5.5.2.3
Persons authorized to grant external company passes	7.2.6
SiteView	4.1
Scaffolds	5.15

Other mandatory documents (Overige verplichte documenten)	Section
Site access requirements for drivers	5.9.1

Contents

General

Notifications

Soil and site  
planning

Infrastructure

SHE

Permits  
(government-  
tal)

Security

Emergencies

Shutdown and  
start-up  
programmes



## Overview of Best Practices

N.B. Best Practices have the status of advice, which can be deviated from without reasons having to be stated.

Best Practices	
•	Training for specific tasks / work (Opleidingen specifieke taken / werkzaamheden)
•	Measures to be taken against high and gusting winds (Maatregelen bij harde wind / windstoten)
•	Mobile grit blasting (Mobiel gritstralen)
•	Job-related helmet colours (Functiegebonden kleur helmen)
•	Site Work Permit procedure (Procedure Site Werkvergunning)
•	Electrical regulations (EBV)
•	LMRA
•	Additional information Life Saving Rules (Aanvullende informatie over de Life Saving Rules)
•	Working safely with hoisting ropes and hoisting bags (Veilig werken met hijstouwen en hijszakken)
•	Frequency Management (Frequentie management)
•	Inspection of stationary IBL fire-fighting installations (Inspectie stationaire IBL-blusinstallaties)
•	Filming and photography on the Chemelot site form (Formulier filmen en fotograferen op Chemelot)

Contents

General

Notifications

Soil and site  
planning

Infrastructure

SHE

Permits  
(government-  
tal)

Security

Emergencies

Shutdown and  
start-up  
programmes

