



Regulations Brightlands Chemelot Campus

Version March 22 2018, updated August 30, 2021



Introduction

The Brightlands Chemelot Campus (BCC) is a place for research on chemistry and materials. It is home to offices, labs, cleanrooms, testing factories, parking areas and roads, green areas and technical infrastructure, among other things. It is managed by the BCC organization. In addition, the Campus also offers supporting services and facilities. Everything on BCC is focused on high-quality research and a stimulating environment, under the Brightlands flag.

You are part of an exciting international community of professionals and scientists who work for various organizations: R&D departments of major chemical and biochemical companies, SMEs, startups, higher education and research institutes.

Within this community, the rules and regulations described in this document are focused on preventing undesired incidents so that the entire community can work smoothly and efficiently. It is in everyone's interests to be aware of these rules, and to adhere to them.

The regulations are based on Dutch legislation and regulation, and the regulations of the Chemelot site. They are focused on managing the risks related to Safety, Health, Environment and Security. (Abbreviated to SHE&S: Safety, Health, Environment & Security. The Dutch version of the BCC regulations is always leading.)

Bert Kip, CEO Brightlands Chemelot Campus Hugo Hendriks, COO, Director Services, Site Manager Brightlands Chemelot Campus



Contents

1	Intro	duction4
	1.1	What, why, from and for whom?4
	1.2	Principles and context4
	1.3	Monitoring and enforcement4
	1.4	Work area and exemption5
	1.5	Announcement and distribution5
	1.6	Environmental permit5
	1.7	Working Conditions Act (Arbowet)5
	1.8	Security5
	1.9	Reading guide6
2	Safet	ty, health, environment and security6
	2.1	Objective6
	2.2	Functions6
	2.3	Reporting accidents and incidents8
	2.4	Contractors8
	2.5	Training and instruction9
	2.5.1	SCC (VCA) contractor personnel9
	2.5.2	Access instruction9
	2.5.3	Emergency response officers9
	2.5.4	Last Minute Risk Assessment9
	2.5.5	Connecting gas canisters10
	2.6	Brightlands Campus practices10
	2.6.1	Managing SHE risks10
	2.6.2	SHE risks in the event of changes 10
	2.6.3	Work permits10
	2.6.4	Lock-out Tag-out Try-out11
	2.6.5	Life Saving rules11
	2.7	Last Minute Risk Assessment12
	2.8	Electrotechnical safety12
	2.9	Traffic and transport12
	2.10	Utilities
	2.10.	Safety-critical installations13
	2.11	Overtime and solitary work13
	2.12	Zones with explosion hazards14

	2.13	Smoking, alcohol and drugs	14
	2.14	Legionella prevention	14
	2.15	Pressure equipment	14
	2.15	.1 Gas canisters	14
	2.15	.2 Pressure reducing valves	15
	2.16	Nuclear Energy Act permit	15
3	Your	safety	15
	3.1	Operational Centre Brightlands	15
	3.2	Sounding the alarm	15
	3.3	Siren alarm	16
	A sir	en alarm sounds: what now?	16
	3.4	Evacuation	17
	3.4.1	Evacuation: what now?	17
4	Envii	ronmental permits	17
	4.1	General	17
	4.2	Chemical administration	18
	4.2.1	Waste materials	18
	4.3	Unexpected incidents	18
	4.4 pattern	Foreseeable irregularities in discharges	
5		·SS	
	5.1	Access identification	19
	5.1.1	E-ticket	19
	5.1.2	Permanent company badge	19
	5.2	Access with vehicles, parking policy	20
	5.2.1	General rules	20
	5.2.2	Rules per target group	20
	5.2.3	Specific rules	21
	5.3	Reception	22
	5.4	Enforcement	22
6	Fire	and other emergency situations	23
7	Арре	endices	24
	7.1	List of links to appendices	24
	7.2	List of functions and function-holders	3.25
	7.3	List of abbreviaties	27
	7.4	Key modifications	28



1 Introduction

1.1 What, why, from and for whom?

This document provides the requirements and the code of behaviour which apply on the Brightlands Chemelot Campus (BCC). These requirements focus on preventing incidents and calamities that compromise safety, health, environment and security. The rules are part of the rental agreement between Brightlands and the tenant. They are compiled by the SHE&S department at BCC in consultation with (representatives of) the tenants, the SHE&S consul. They are enforced by the Chemelot Site Policy Board, Brightlands Chemelot Campus Board and the Brightlands Chemelot Campus Community Board, where all tenants are represented.

Everyone on the campus must adhere to these rules via the rental agreement or equivalent contracts (e.g. services providers). BCC closes rental agreements with tenants. These agreements show in close detail what is rented (offices, labs, halls, etc.) and under which conditions. One of the conditions of the tenant is to inform and instruct his staff members, students, suppliers, clients, visitors etc. about these rules so they are followed and adhered.

1.2 Principles and context

The rules set out in these regulations are the rules of the Chemelot site and the national laws and regulations of the Dutch State. The aim of the legislation and SHE&S provisions is to identify and manage risks by suitable measures. Together with leadership, assurance, demonstrability, and constant improvement, among other things, they make up some of the principles of good management.

Everyone on the campus (staff members, tenants, companies, students, visitors) is part of a community. These rules are essential to

maintain the community and allow it to blossom. Imagine that your neighbour encounters an incident that causes damage to your installations or endangers our environmental permit. We do not want to risk our *License to Operate, LoT*.

The key is therefore 'look before you leap 'and 'better safe than sorry'.

The expectation is to work in a professional way: a way that is characterized by effective preparation, meticulous implementation and tangible results. Good preparation means an analysis of the aims, the context and secondary conditions, and an integral planning. The implementation not only includes the actual work, but also communication between those who are directly involved. Achieving these results means, in addition to determining the achieved goal, also providing information about adhering to the secondary conditions. These three steps are essential for external use (taking responsibility) and internal use (learning).

The aim is to keep the risks of all activities as low as possible. *As Low As Reasonably Practicable*, ALARP.

1.3 Monitoring and enforcement

The following requirements and rules are critical to the success of the campus in the short- and long term. Monitoring enforcement takes place by inspections and audits, so that it becomes more apparent where improvements are possible. The annual inspection and audit plan are issued by BCC SHE&S department to the campus residents on behalf of the BCC Site Manager.

If required, enforcing actions are performed by the BCC Site manager. The processing takes place in adherence to the guideline "Compliance policy with regards to regulations".



1.4 Work area and exemption

The requirements and rules described below are the minimum requirements that apply to the entire campus grounds. After submitting a substantiated written request, the BCC <u>Site Manager</u> can grant an exemption.

1.5 Announcement and distribution

The document and further supporting information can be found on the Brightlands website. An adjusted version is published once in a year on the Brightlands website.

1.6 Environmental permit

The government sees the entire Chemelot site as one setup and has issued one permit on the grounds of the Environmental Management Act (and the Environmental Permitting (General Provisions Act or WABO) to Chemelot Site Permit BV (CSP), the formal permit holder. This permit specifies i.a. the maximum emissions, the requirements and reports. The Chemelot Site Permit consists out of a CSP BRZO¹ safety report, a CSP management system, a Chemelot company emergency plan and a disaster organization. The CSP makes agreements with the companies that operate and use the infrastructure on the Chemelot site. CSP also evaluates compliance with these agreements.

BCC has - just like other site users - its own partial permit according to the Environmental Management Act and the Environmental Permitting (General Provisions) Act (WM/WABO) and is legally liable for compliance. These requirements are presented to the tenants by the rental agreements. The permit functions as a general framework on the campus. The total activities must remain within this framework.

The Dutch Working Conditions Act (Arbowet) organizes the safety and health aspects of working attitudes. The employer and his employees are central to this. The Working Conditions Act also states that employers must work together regarding health- and safety aspects.

The heart of the Working Conditions Act consists out of:

- (1) Inventory and evaluation of risks (RIE).
- (2) Instituting measures to minimize risks.
- (3) Instructing and communicating about the safest working method.
- (4) Cooperation between employer and employees and between companies and firms when they work close with each other.

Over the years, many risks and best practices have been developed and formulated. The requirements in this BCC regulation describe the *best practices* for occupational risks, specific for the campus. These are enforced by the Brightlands Chemelot Campus Board and the Community Board where all tenants are represented. BCC landlords are responsible for the implementation of these requirements.

1.8 Security

Security concerns the preventing of incidents and occurrences due to intentionally harmful activities. This can be categorized into site security (arson, bomb attacks, protesters etc.), personal security (bullying and harassment, theft etc.) and information security (data security). Security is an integral part of the following regulations. BCC is completely

^{1.7} Working Conditions Act
(Arbowet)

The Dutch Working Conditions Act (Arbowet)

¹ BRZO = Major Accidents (Risks) Decree. The Dutch implementation of the Post Seveso Guideline.



separated from the Chemelot Industrial Park by a fence with turnstiles/tourniquets which meet the requirements for a first line perimeter fence; access at the gate does not meet these requirements. The campus has placed the security borders at the level of the buildings (only accessible with an authorized pass or after reporting to the reception). The access control of the campus is therefore only focused on Safety and registration, not on security. Sitech Services Security provides monitoring outside the buildings on the perimeter fences and enforces compliance with the access rules.

In an emergency the first fence around BCC itself can be closed from the Central incident room ACC of Park Services by closing the fence before gate 2. Several buildings on BCC are outside this first line perimeter fence around the campus (van Iterson building 124-037, ARLANXEO building 111-160, Lonza Netherlands/MEP building 111-014-017-018-019).

For security reasons, residents, students, contractors may be requested to show the BCC pass for legitimation. Visitors are in the possession of an E-ticket with QR-code.

In the event of non-compliance with the security rules, the <u>BCC SHE&S department</u> will apply enforcement measures.

1.9 Reading guide

To increase the legibility and accessibility, the rules have been clearly and succinctly formulated by adding referrals to specialists and *best practices*. In addition, an index and a list of attachments can be found on the Chemelot internet. Questions, comments or suggestions for improvements are welcomed by the BCC SHE&S department.

2 Safety, health, environment and security

2.1 Objective

The objectives for safety, health, environment (SHE management) in the campus community (incl. tenants, students. visitors and contractors) are:

- Achieving an accident-free and incidentfree working environment.
- Preventing all occupational-related illnesses and health problems caused by activities at the Chemelot site.
- Constantly evaluating and improving the way of working and services in order that these will remain safe and acceptable for staff members, clients and the surrounding area, so that the 'License to Operate' remains intact.
- Preventing environmental damage.

These objectives apply to everybody on the campus, regardless of status. To achieve these objectives, BCC has developed, in close consultation with the tenants, a SHE management system. This system describes how BCC is organized and functions at both strategic as well as operational level. This document including the requirements is limited to the agreements at operational level.

2.2 Functions

The most important functions at operational level are described.

The **Landlord** carries out the daily management of the spaces, buildings and installations which are allocated to the tenant/owner and occupied by him/her. This includes:

 Making agreements with residents, students, visitors and companies about the tasks, authorities and responsibilities concerning the SHE management.



- Identifying the SHE risks associated with the activities carried out within the landlord area.
- Taking suitable measures to reduce the SHE risks to a minimum.
- Reporting irregular cases to the Duty Officer.
- Point of contact for the Duty Officer/Day Officer if work needs to be carried out on building-related installations in the landlord area.
- Administration of the chemicals present in the landlord area.
- Functions as Head of Commissioning (CO) with work permits in his landlord area and/or to his installations.
- Managing SHE documentation of a building, utilities, installations and compilations (manuals, drawings, test reports, PED statements, etc.).
- Order, tidiness and safety signaling.
- Consultation and informing Emergency Response Officers (ERO's) in their building.
 Note that the BCC <u>rental administration</u> has an overview list of landlords.

The **Duty Officer** (CvD) acts on behalf of the BCC Site Manager as the landlord of installations, buildings, roads & grounds with general functions and non-rented areas. The Duty Officer is a staff member of the Operational Centre Brightlands (OCB) that operates 24/7. The key tasks include:

- Receiving and instructing company staff members about safety rules and provisions
- Creating work permits (Head of Commissioning).
- Daily closure of the buildings around 8 p.m. and opening around 7 a.m. This is done by Park Protection Services.
- Acting as point of contact for all occurrences, incidents and accidents.
- Coordination and adequate response in case of incidents. Activation of the ERO's a.d. ERO calling system. Invoking the support of Chemelot services of the Alert & Care Centre (ACC).

- Delivering reports of unusual occurrences to the authorities and Chemelot Site Permit BV via the Operational Centre Chemelot (OCC).
- Managing waste streams and gas canisters.
- Registration, management and monitoring of campus residents via Safetel (solitary work).
- Authorized person with regards to company access badges and Permit to discharge (VTA).
- Supervisor of contractors.

The Day Officer:

- Receiving and instructing company staff members about security rules and provisions.
- Issuing work permits.

In relation to a work permit, the **Head of Commissioning** (CO) is responsible for whether a work permit is required or not. On behalf of the receiving department, the Head of Commissioning approves and signs the conditions as determined in the work permit, including the work to be carried out. This is generally the Day Officer, Duty Officer or the Landlord Head of Commissioning.

The **Direct Head of Commissioning** (DCO) is the functionary which consents locally prior to receiving the work. The Direct Head of Commissioning checks whether all prescribed measures are taken and whether the working environment is safe.

The SOS-SCC diploma (Safety for Operational Supervisors - safety, health, environment checklist contractor; Dutch: "VCA-Vol") is mandatory for all (Direct) Heads of Commissioning with an exception for the Direct Heads of Commissioning in the lab rooms of the companies and institutions present on the campus. An alternative for SOS - SCC (Dutch: VCA-VOL) is the Basic – SCC diploma (Dutch: "VCA basis") supplemented with the training "operational management elements".



The Head of Execution (CU) and the Direct Head of Execution (DCU) with a work permit are the executing party which is not common with the local risks, but common with the type of the work. They take measures so that the work can be carried out safely. Generally, the Head of Execution and the Direct Heads of Execution are company staff members. The SOS-SCC diploma (Safety for Operational Supervisors - safety, health, environment checklist contractor; Dutch: "VCA-Vol") is mandatory for all Heads of Execution. The Basic - SCC diploma (Dutch "VCA-basis") is mandatory for all Direct Heads of Execution.

All accidents and occurrences with (possible) injury and occurrences and unusual incidents with possible consequences for the environment must be reported to the <u>Duty Officer in the Operational Center Brightlands</u>.

	Mobile	Land line
Alarm	+31622904304	+31464764444
Non-	+31651425015	+31464767182
urgent		

The <u>BCC SHE&S department</u> is responsible for the SHE Management system:

- Monitors external developments in laws and regulations and assesses the relevance for BCC.
- Monitors compliance with permits and the SHE management system.
- Advises campus residents about managing risks, compliance with BCC requirements and laws and regulations.
- Consults with internal- and external interested stakeholders.
- Reports to BCC Site Manager.

The BCC <u>Site Manager</u> is manager of BCC on behalf of the CEO:

- Final responsible person for SHE aspects on the campus.
- Reports to CSP and the authorities.

2.3 Reporting accidents and incidents

The performances on Safety, health, environment (VGM) of Chemelot and - therefore also of the campus - are published each month and contain i.a. the amount of accidents resulting in absenteeism, adjusted work and medical treatment. This is the reason why it is important that all accidents are registered a.d. a safety notification in <u>Facilitor</u> or the <u>BCC SHE&S website</u>.

The Environmental Management regulation, Soil conservation regulation and the Nuclear Energy regulation also obligations to report complaints, incidents and permit violations to the authorities. The BCC SHE&S department takes care of these reports in consultation with the landlord where the incident took place.

2.4 Contractors

At BCC, contractors are frequently at work and are suppliers of BCC. This group needs special attention for multiple reasons. Firstly, their work often involves an increased risk (working at heights, working with installations, industrial cleaning). Secondly, they do not stay for a long period on the campus and are therefore unaware of the applied safety precautions. Thirdly, their work disturbs the normal way of working.

Contractors that carry out work involving an increased risk are required to possess a <u>SHE&S Checklist Contractors</u> (SCC*, Dutch: VCA*) or SCC** (VCA**) certificate. Performing works with an increased risk need to meet the following disciplines (both engineering as well as implementation): mechanical engineering, electrical engineering, instrumentation and process control, civil engineering, assembly work, insulation work, scaffolding, industrial cleaning, hot blasting, painting, conservation, vertical transport and demolition.



SCC* is required for monodisciplinary contracts with a smaller scope. SCC** is required for multi-disciplinary works with a larger scope. SSC-certificates are organized by the Foundation Cooperation for Safety (Dutch: Stichting samenwerken Voor Veiligheid or SSVV). SCC certification also includes training and instructions for various high-risk tasks such as scaffolding construction, using mobile work platforms, driving forklift trucks. The Foundation Cooperation for Safety course handbook and the Security passport can be found here.

2.5 Training and instruction

2.5.1 SCC (VCA) contractor personnel

Employees of SHE Checklist Contractors (SCC) obligated contractors have a Basic - SCC or SOS - SCC diploma. The first is for executive personnel. SOS - SCC is for supervising staff personnel. In practice, it is possible that employees of contractors who must carry out work on the Brightlands Chemelot Campus are not in possession of a SCC certificate, for example because they come from abroad or work in an industry in which SCC certification is not customary. The CCP <u>Application SCC duty</u> (Dutch) provides guidelines on how to deal with the SCC duty in these cases.

2.5.2 Access instruction

Staff members, contractors, and students on campus need to follow the access instructions in advance. Visitors follow shortened access instruction. See also the chapter <u>5. Access</u>.

New staff members are demonstrably instructed by their employer or supervisor about the most important dangers and provisions, the importance of care for safety, health, environment (VGM) for the entire Brightlands Chemelot Campus. The <u>safety chart</u> can be used for this. Every new tenant receives an <u>onboarding</u> focused on SHE&S topics. After this, the tenant is responsible for instructing his

own new employees. There is also a general onboarding program that supports the introduction of new employees to the campus. Every contractor who carries out work for third parties must be in possession of a <u>safety chart</u>. The instruction of the security chart can only be supplied by the Duty Officer (CvD) or the Day Officer.

2.5.3 Emergency response officers

Emergency response officers (ERO's) are located close to all workplaces. ERO's are made recognizable by lists which are present near the coffee machines. The Duty Officer can activate the ERO's via an ERO calling system. ERO's act in the event of minor inconveniences and accidents, when people become unwell and check areas during evacuations (floorsweeping). ERO's know how to respond to an alarm or evacuation.

At several locations on the campus there are portable fire extinguishing units installed to stop a started fire. Be aware that portable extinguishers are ineffective and dangerous in the hands of inexperienced users. That is why one must sound the alarm before using them. ERO's have received training instructions how to handle small fire extinguishers and are authorized to use these extinguishers.

The <u>BCC SHE&S department</u> coordinates the trainings, exercises and resources (first aid bag and vest) for the ERO's.

2.5.4 Last Minute Risk Assessment

People who work in high-risk situations are demonstrably instructed to use the Last Minute Risk Assessment in order to start the work safely. The instruction can be found on the <u>Chemelot internet</u>. This instruction is also provided by the Day Officer and signed on the security chart or in the safety card. A list of LMRA instructors is available with the Duty Officer and the BCC SHE&S department.



The <u>BCC SHE&S department</u> can provide a train-the-trainer course upon request².

2.5.5 Connecting gas canisters

Staff members who have successfully completed training for connecting and disconnecting gas canisters, are permitted to carry out these actions.

The <u>BCC SHE&S department</u> has more information. See also chapter 2.15.1 and 2.15.2.

2.6 Brightlands Campus practices

2.6.1 Managing SHE risks

Managing SHE risks forms the basis for defining the guiding principles (see 1.2) and function roles (see 2.2). Risks are assessed in advance and management measures are taken. Existing measures are usually enough, as documented in instructions, drawings and manuals. When changes are made, it is required to assess the risks of the new situation and the changes. After completion, the results are recorded in logbooks, statements, forms etc. The purpose is on the one hand assurance and on the other a baseline measurement for review and improvement.

There is also an external objective: SHE annual report for interested parties and of retaining the *License to Operate*.

2.6.2 SHE risks in the event of changes

The term *Management of* Change (MoC) is used in the context of changes to the organization, installations, equipment and facilities (e.g. in change projects and new building projects). Normally there are two integral³ decision moments. The requirements and secondary conditions are defined at the

start. Risk reducing measures and residual risks are assessed shortly before commencing use.

If the changes can have an effect outside the area of the landlord, or can cause a potentially fatal accident scenario then the changes need to be presented to the campus Acceptation Commission.

If changes involve transferring (parts of) installations or equipment to others (waste, storage, sale), then they must be cleaned first, so that no materials that might pose a hazard to people or the environment are present. The <u>cleaning form</u> (Dutch) ensures that cleaning occurs accurately.

The Brightlands Chemelot Campus Practices MoC (Dutch) & Acceptation Committee (Dutch) provide more information. Other questions can be asked to the BCC SHE&S department.

2.6.3 Work permits

The work permits safeguard SHE measures in the event of specific location or work-related risks. By means of the permit, information exchange takes place between the commissioning party and the executing party about the local risks, work related risks and how both can be optimally managed.

There are two types of permits. A work permit is required for high-risk work. A check and written determination of the permission on the so-called transfer form is enough for moderate-risk work.

The procedure <u>work permits</u> (Dutch) provides more information. You can direct further questions to the <u>Day Officer</u>.

Making a work permit requires a good assessment, thorough preparation and planning. For the preparation of work permits where the Operational Center Brightlands has

² Is temporarily no longer given due to the transition period to <u>LMRA 2.0</u>.

³ Integral = incorporating input from all disciplines.



the role of Head of Commissioning, the following procedure applies:

- From Monday to Wednesday and Friday, the Day Officer has consultation hours between 10:00 and 12:00 in building 121-250. During this consultation hour, work permits can be requested and/or questions can be asked. Outside these times, this is done by appointment.
- The application for the preparation of the work permits must be submitted at least 3 working days in advance to the execution.
- The applicant fills in a <u>request work permit</u> (Dutch) as completely as possible in accordance with his own insights.
- The applicant ensures that the necessary documents are handed over to the Day Officer during the meeting. (If applicable, a signed copy of the SHE plan, BOSANIS report, dig ground info, flushing plan etc.)
- The Day Officer ensures that the draft work permit is ready for approval at the agreed date/time. (The work permit is approved by the Head of Execution carrying out the work.)
- The client ensures that executive persons are in possession of the correct instructions such as LMRA, SCC (VCA) etc.
- The Head of Execution of the main contractor is responsible that the key-user of his company requests a permanent company badge (via the <u>Brightlands Access</u> <u>Portal</u>) for own employees that perform work using a work permit. The Head of Execution of the main contractor is also responsible that the key-user of the subcontractors request a permanent company badge for own employees.
- The additional instruction such as the campus safety instruction, KRAs are given by the Duty Officer.

2.6.4 Lock-out Tag-out Try-out

The Practice "Lock-out, tag-out, try-out (LoToTo)" is focused on protecting people who

are carrying out on installations or equipment, which are supplied with energy sources or that can contain stored energy. Persons are protected by a physical protection. LOTOTO prevents unintended movements and/or the unintended release of energy and/or dangerous materials.

Additional information can be found in the Chemelot LoToTo Practice (Dutch).

2.6.5 Life Saving rules

On the Chemelot and Site - and therefore also on the Brightlands Campus - <u>10 Life Saving Rules</u> are applied. These rules give unambiguous requirements to be able to work safely; concerning:

• Authorization:

- Work permit: Use a valid work permit before starting work.
- Line Break: Make sure you have proper tuning and controls before opening a pipe.
- Management of Change: Do not make any changes without the predefined Management Of Change.
- Bridges: Make sure you have the correct permission and measures before you disable or bypass critical safety equipment or protections.

• Protection:

- Entering confined spaces: Test the air in a confined space before entering it.
 Convince yourself that all measures have been taken.
- Work at height: Protect yourself from falls and avoid falling objects when working at height.
- Lifting and Hoisting: Stay out of the area where objects can fall.
- Transport safety: Ensure safe interaction between vehicles, people and installations.

Aware and behave responsibly:

 Line of fire: Stay out of the area where you could be hit or pinched.



 LOTOTO: Secure machines or equipment according to the LOTOTO procedure before you start your work.

2.7 Last Minute Risk Assessment

The Last Minute Risk Assessment (LMRA) teaches contractors to carry out a quick check prior to the work with increased risk whether:

(1) All provisions are in good condition and are present, (2) other prescribed measures are clear and enough and (3) whether there are any more other visible risks present.

The LMRA is implemented based on the LMRA card, directly prior before starting the work by the staff who will carry out the work. If questions are answered with "No", then the work is not permitted to start until this situation is resolved and the question can be answered with a "Yes".

Additional information can be found on the Chemelot LMRA website⁴.

2.8 Electrotechnical safety

The Brightlands Chemelot Campus follows the NEN3140 for the operational management of low-voltage electrical installations at Brightlands Chemelot Campus.

On the NEN3140, the EIB (Electrotechnical Instructions Brightlands) and the GEI (Generic Electrotechnical Instructions) apply.

The <u>EIB</u> (Electrotechnical Instructions Brightlands; Dutch) refer to the paragraph from the NEN3140 to which it relates.

The <u>GEI</u> (Generic Electrotechnical Instructions; Dutch) are specific additional BCC instructions.

For work in the high-voltage installations of Brightlands Chemelot Campus BCC follows the NEN3840 without further additions.

The above NEN standards and additions regulate, among other things, various powers and activities: switching operations, commissioning, electrical work, inspections, etc.

Private devices, e.g. household equipment, TVs, transmitting, receiving and playback equipment are permitted, provided they meet the same safety requirements as for other electrical equipment, as described in NEN-3140, EIB and GEI.

The complete Electrical Instructions Brightlands and GEI (Generic Electrotechnical Instructions) can be found as an appendix to the Brightlands Chemelot Campus regulations. Questions can be asked to the BCC <u>Electrical installations responsible</u>.

2.9 Traffic and transport

The Traffic Regulations and Road Traffic Signs Code (RVV 1994) apply throughout the entire campus grounds. The maximum speed limit is 30 km/h, with an exception for the shared space zone, this is a pedestrian zone that is also accessible to cyclists and destination traffic. Here, it is only allowed to drive at walking pace.

Parking is only allowed at the indicated parking areas as described in chapter <u>5.2 Access with vehicles</u>, parking policy.

Reverse parking is mandatory in all <u>parking</u> <u>areas</u> that are suitable for this, with the exception of P10 for visitors, P8 for tenants/contractors/visitors, MIVA and logistics parking locations.

⁴ The old LMRA card and -instruction will remain valid until the availability of a tailor made <u>LMRA</u> <u>2.0</u> training for BCC.



It is not allowed to park on/along the roads or in the shared space zones on the Campus.

Truck drivers who load and unload heavy goods have access via the regular Chemelot Industrial Site procedure near Gate 1. Depending on the destination of the truck, the truck driver receives access to the Campus via the North gate (near parking P5) or the South gate and leaves the campus via the East gate. Truck drivers receive at Gate 1 driving directions, a driver safety instruction card and an access badge if the truck driver has no permanent company badge. For questions, please contact the property manager infrastructure.

Transport of chemicals on public roads are bound to many legal regulations, including sending samples, test lots, etc. Questions for an ADR safety advisor can be asked via the BCC SHE&S department.

2.10 Utilities

BCC supplies various utilities: electricity, compressed air, measuring air, nitrogen, various types of water, steam, natural gas and special gasses. For delivery requests, questions, comments and complaints, please contact the Brightlands Servicedesk, Tel. +31889995777.

2.10.1 Safety-critical installations

The campus has several safety-critical installations. They are managed by the Property Manager of the building (accessible via the <u>Brightlands Servicedesk</u>). Work on, or close to, these systems may cause risks and disturbances. That is why consultation and agreements between the tenant, the Property Manager and the <u>Operational Center Brightlands</u> are required. These systems include:

• Building-related

- Electricity earthen systems and lightning conduction systems
- Access to roofs and fall protection measures
- Asbestos that is permanently incorporated in the building structure
- Hoist installations that are part of the building structure
- Fire and smoke partitions
- Air treatment systems
- Confined spaces
- Elevators
- Escape routes/emergency doors/ emergency hatches

• Emergency and fire provisions

- Fire extinguishers
- Fire alarm systems
- o Public announcement systems
- Emergency lighting
- Reasonably airtight rooms (RDR/toxic shelters)

• Labs and chemical handling facilities

- ATEX zones around pipes
- Chemical storage in buildings: Cupboards
 & Chemical lockers
- Legionella control
- Emergency eyewash facilities and showers
- Natural gas reduction stations
- o Fume chambers, incl. extraction fans
- Mechanical- & Instrumental safety provisions
- Watertight Leak trays –floors
- Media containing pipes in pipe racks and in buildings

2.11 Overtime and solitary work

Solitary work is possible if no-one else is in the immediate proximity. Such work has an increased risk. Solitary work in lab areas and mini plant installations is not permitted without Safetel monitoring. Interns and



temporary staff members are not permitted to work solitarily.

At the <u>Operational Center Brightlands</u>, personal monitoring equipment ('Safetel') can be borrowed which can be used to remotely monitor someone working).

Working outside regular work hours (07:00-20:00) is permitted after reporting to the Operational Center Brightlands (building 121-250, Tel. +31 65 14 25015).

2.12 Zones with explosion hazards

An explosion hazard may exist near pipes containing flammable and explosive substances. In these so-called ATEX zones, electrical installations and equipment and other items are subject to special provisions. These zones are determined in accordance with NPR 7910 and determined in Explosion Safety Documents.

Changes to Explosion Safety Documents and ATEX zoning must first be submitted to the BCC Acceptation Committee for approval. This committee evaluates the quality of the reports according the NPR7910 on behalf of the BCC community. The Property Managers manage these documents. For questions, please contact the BCC SHE&S department.

2.13 Smoking, alcohol and drugs

Regarding safety and health, no smoking is permitted on campus (including parking areas and access roads). This also applies to the use of the so-called E-cigarette.

If a tenant has provided an approved smoking area within his own landlord area, smoking is only allowed in this designated area for people who have access to his rental compartment.

Alcoholic drinks and drugs are not permitted on campus. It is not permitted to be under the influence of alcohol or other drugs.

2.14 Legionella prevention

Fire hose reels, eyewash facilities and emergency showers are sealed. They are part of the building facilities and are managed by BCC. If these provisions are used in emergencies, then those involved (victims, bystanders) must report that use to the first aid room in the ACC-building so that possible legionella infections can be promptly identified.

2.15 Pressure equipment

Equipment (containers, pipes, installation parts etc.) with a maximum permissible overpressure of 0.5 bar or more come under the European Guideline for pressure equipment Guideline 97/23/EG, also known as the *Pressure Equipment Directive (PED)*. The landlord manages the mandatory documents (construction files, approval norms, certificates etc.). For questions, please contact the <u>BCC SHE&S department</u>.

2.15.1 Gas canisters

Gas canisters are solely situated in the appropriate cupboards and recesses, outside the workplace or lab. The BCC Site Manager gives permission for placing gas canisters in the lab room after approval by the Acceptation Committee in response to a substantiated request. Use the following release form for placing gas canisters to request an approval.

The landlord is responsible for the registration, exemption and prompt periodic approval testing of all gas canisters under their management.

All gas canisters on the campus are registered in a registration system for chemicals. You must also consider the legally mandatory approval regime for pressure units.

People who have successfully completed the 'connect and disconnect gas canisters instruction' can carry out these actions. Gas



canisters in laboratories which are part of a research setup can be connected by a laboratory technician who was trained for this as part of his professional education.

Exemption is not required for gas canisters on welding carts, propane canisters ('camping gas'), PA units and fire extinguishers in the work areas or labs.

2.15.2 Pressure reducing valves

The assembly of pressure reducing valves are reserved for people who have successfully received the instruction for working with pressure reducing valves. Pressure reducing valves which are part of a research setup in a laboratory can be assembled by a laboratory technician who was trained for this as part of his professional education.

For questions, please contact the <u>BCC SHE&S</u> department.

2.16 Nuclear Energy Act permit

The Brightlands Chemelot Campus is a signatory to the location-wide complex permit in the context of the Nuclear Energy Act. This permit is intended for the application of (natural) radioactive material and X-ray units by all residents on the campus.

Supervision of the use of (natural) radioactive materials and/or X-ray units within the partial permit has been assigned to the Committee for Management of Radioactive Substances (Beheer RAS). Additional information can be requested from the <u>General Coordinating Radiation Expert</u> of Chemelot Site Permit (CSP) BV.

Each new application or change in a current application of a radioactive source or X-ray unit must be submitted to "Beheer RAS" by the landlord. Only after "Beheer RAS" has provided

written permission can the (changes to the) application be implemented, under the conditions determined by "Beheer RAS".

The disposal of radioactive materials, equipment, units, measuring instruments, ionization smoke alarms (including exempt alarms) which include radioactive sources, X-ray units etc. must occur in consultation with "Beheer RAS".

In areas that may contain radioactive sources and/or X-ray units, the line manager of the landlord must be instructed via "Beheer RAS" about the applicable regulations governing ionizing radiation. Personnel operating equipment that contains radioactive sources and/or X-ray units should also be instructed about the use of such equipment via "Beheer RAS".

3 Your safety

3.1 Operational Centre Brightlands

The Operational Centre in building 121-250 is the operating base of the Duty Officer and the Day Officer. This is the central point for day-to-day preventive and corrective safety management on the campus. This post is manned 24/7 and has the most comprehensive overview of the utilities, (status, instructions etc.) and various work activities. Work permits are prepared, issued and revoked from the Operational Centre Brightlands. The Centre also plays a central role on the campus in signaling and responding to emergency situations Tel. +31 46 4767182.

3.2 Sounding the alarm

Call the alarm number Tel. +31 46 47 66666 at:

 Medical emergencies (accidents, sudden illness, poisoning).



- Other unusual incidents (fire, explosion, incidents involving transport vehicles, tanker trucks etc.).
- Incidents with a radioactive source.
- Incidents with pipes and pipe racks.
- Gas leaks.
- Air, water and/or soil pollution.

The alarm number Tel. +31 46 47 6666 is connected with the Operational Center Chemelot in the ACC building. Give your name and telephone number, the location of the incident (building, level, room number) and answer additional questions.

Also inform the Duty Officer, call the BCC emergency number Tel. +31 46 47 64444. The Duty Officer will then take adequate measures and —if necessary —set a campus emergency plan in motion.

If you see an unsafe situation (almost an accident, near-miss) it is best to report this to the Operational Centre Brightlands. Afterwards, this also needs to be reported to the BCC SHE&S department via a safety notification in Facilitor or the BCC SHE&S website.

3.3 Siren alarm

The Chemelot site has different siren areas. The campus is <u>siren area 22</u>⁵. When the siren alarm sounds, this means there is a major and immediate (threat of) danger.

The start of the siren alarm is a rising wailing tone of 3 seconds, followed by a descending wailing tone of 5 seconds. This continues for 70 seconds. An announcement via the public announcement system will state which area the alarm concerns and what should be done. When the danger has passed, the safety signal will sound. This is a constant tone lasting for 70 seconds. The announcements can be heard

again when you call the following telephone number +31 46 47 68709.

A siren alarm sounds: what now?

- Stop your work in a safe manner.
- Follow the signposting to a reasonably airtight room (RDR; toxic shelter).
- Are you outside? Immediately enter a building.⁶
- Inside the building, follow the signs to an RDR. Go into the RDR and shut all windows and doors.



- Switch off the ventilation with the stop button (if present).
- Follow the instructions from the public announcement system and follow the agreements for reporting and assembly place which apply to your company or department.
- Remain in the RDR until you hear the 'all clear'signal or a spoken announcement of that nature via the public announcement system.
 - Limit your telephone usage.

The local supervisor acts as an "assembly leader" and will determine if persons are missing. A person is considered missing if there are reasons to believe that he/she is currently in the danger zone. Suspected missing persons are reported to the Duty Officer on +31 46 47 64444 or +31 62 29 04304. If it becomes clear that persons who were reported as missing are safe, then the "assembly leader" will cancel the missing person's report.

⁵ The exception is the van Iterson-building G124-037, which is located in siren area 08.

⁶ Outside regular working hours, go to a building with the title "RDR inside 24/7"



3.4 Evacuation

Everybody on campus is permitted to commence a (limited, local) evacuation when necessary. The reason for the evacuation (hazardous situation, accident, incident) should be reported as quickly as possible to the (1) Operational Center Chemelot (alarm number +31 46 47 66666 of the ACC, (2) The local supervisor and (3) Duty Officer +31 46 47 64444 or +31 6 22 90 4304.

Larger evacuations (e.g. of an entire building) are announced via the public announcement system.

3.4.1 Fyacuation: what now?

- Always obey the order to evacuate.
- Stop your work safely.
- Take measures to prevent people from re-entering the evacuated area.
- Always use the nearest emergency exit to evacuate the building safely. Use the emergency staircases.
- Take enough measures to prevent people from re-entering a building during an evacuation.
- Follow the instructions of the evacuation route to the assembly location that apply within your company or department.
- There are 3 large assembly locations present on campus: PPA, P5, P1.



 The broadcasted message announced via the public announcement system is always leading. The instructions that apply within your company or department are then cancelled.

The local supervisor ensures agreements within the company or department about:

- Securing equipment during evacuation and siren alarm.
- Who takes the lead in the event of a limited, local evacuation?
- Hold an assembly and/or floorsweeping.
- The assembly location to be used.
- Reporting the number of missing persons to the Duty Officer by phone on +31 46 47 64444.

4 Environmental permits

4.1 General

Chapter 1.6 outlines the main points of the BCC Environmental permit. For tenants and their staff members, the main BCC permit on the one hand has the benefits of flexibility and prevention of time-consuming permit procedures. On the other hand, the situation is in no way non-committal: BCC is bound to the partial permit and the rental agreement is also based on this. The entire campus community is mutually responsible for the retention of the License to Operate. The environmental impact generated by office staff is directed and monitored by BCC. The regulations below are required to monitor the environmental impact of lab work and the operation of pilot- - and mini-plants.

Changes in the operation outside the agreed frameworks are always reported to BCC Property Manager and concluded using BCC MoC practice. This includes adding more capacity, working at higher pressures and temperatures, using other chemicals etc. The BCC Property Managers advise and make inquiries to the tenant to clarify expectations or to see how the desired results can be achieved within the available (environmental) frameworks. See also section 2.6.2 SHE risks in the event of changes.



4.2 Chemical administration

The chemical registration program FindMolecule is used for management and administration of the chemical stocks. This information is also used for the environmental annual report and for updating fire-fighting plans.

The <u>BCC SHE&S department</u> will assist you further.

4.2.1 Waste materials

Waste materials are collected separately on campus and processed.

For additional information, contact the <u>waste</u> material manager Tel. +31 464767789.

4.3 Unexpected incidents

Exceptional, unexpected incidents are inextricably linked with carrying out research and development. Note all these cases in the lab journal, production logbook, or suchlike. If the effects of the incident are noticeable outside your Landlord area, you must report it to the Operational Centre Brightlands/Duty Officer. If necessary, they will sound the alarm, register the report and - if required - pass it on. For example, report to the authorities in the case of emissions into the air, soil or surface water or notify other campus residents.

The importance of reporting cannot be emphasized enough. Psychological and social barriers must be overcome to achieve this. On the other hand, comprehensive (and proactive) reporting is essential for the campus and its *License to Operate*.

If the unexpected incident concerns a discharge into the IAZI sewer, this must be reported immediately by telephone to the Control room of the IAZI (Tel. +31464764797) and this must be confirmed in writing within 15 minutes with the "Meldingsformulier afwijkende afvalwaterlozing". (Irregular Waste Water Discharge Notification Form)

4.4 Foreseeable irregularities in discharge patterns

If it concerns a deviation from the existing discharge pattern, planned in the short term (for example rinsing or cleaning work), this must be reported to the Control room of the IAZI (Tel. +31464764797) and then this must be confirmed in writing within 15 minutes with the "Meldingsformulier afwijkende afvalwaterlozing". (Irregular Waste Water Discharge Notification Form)

If it concerns a foreseen deviation from the discharge pattern (for example, planned stops) this must be discussed with the IAZI 4 weeks in advance. (contact.iazi@sitech.nl)

New substances, which have not been notified before must be discussed in advance with <u>BCC SHE&S</u> and then approved by the IAZI.

It is not allowed to discharge solids into one of the sewer systems.

5 Access

Different rules apply for access to and security of the campus grounds than for access to the Chemelot Industrial Site. The campus access instruction only gives access to the campus location: access to the Chemelot Industrial Park must be requested via a separate instruction and access regulation via the Sitech Portal. Access to the campus remains separated from the outside world by turnstiles (pedestrians/cyclists) and barriers (cars) and is only for authorized persons who have a permanent company badge.

The regular opening hours of the campus are from 07:00 to 20:00 on weekdays. Outside the regular opening hours, the campus is closed with a fence and a card reader which is used to register authorized persons with a permanent company pass.



Visitors/couriers need to have an E-ticket with QR code for access to the campus during regular opening hours. When arriving outside these hours, visitors/couriers must report to the Duty Officer.

5.1 Access identification

The access identification is supplied by BCC with registration in AEOS with solely access to BCC. BCC applies an access policy aimed for 5 target groups. Visitors and couriers have access to BCC using an E-ticket with QR code. Campus tenants, students and contractors have access to BCC with a permanent company badge.

The access identification does not have to be worn visibly at BCC: the registration of residents/visitors is mainly related to safety and allows people to move freely around the campus. The security boundaries are at building level and the landlords can impose the wearing of a permanent company badge compulsory within their landlord area. BCC uses the site standard for badges to ensure compatibility.

Residents/visitors can be asked from a security point of view to show a BCC access identification and to identify themselves.

Access to the campus provides more information about the various access identifications.

5.1.1 E-ticket

<u>Visitors</u> visit the campus for a meeting, event, etc., and only perform office work. A receiving party, which is housed on BCC, must register visitors in <u>Facilitor</u> prior to their visit to the campus. After the registration, the visitor will receive an email with the request to follow a short access instruction. After following the access instruction, the visitor will receive a second email containing an E-ticket with a unique QR-code, along with parking information and a map of the campus. The

visitor scans the uniquely QR-code at the barrier, pedestrian or cyclist turnstile at the Gate 2 entrance. Visitors park their car in the parking locations P10, P5 and P8. A QR-code for several days, up to a maximum of 7 days, can be requested in <u>Facilitor</u>.

Couriers deliver packages to a receiving party housed on BCC. The receiving party registers a courier in <u>Facilitor</u> as a 'visitor'. After the registration, the courier will receive an email with the request to follow a short access instruction. After following the access instruction, the courier will receive a second email containing an E-ticket with a unique QR-code, along with parking information and a map of the campus. The courier scans the unique QR-code at the barrier at the Gate 2 entrance. The courier will only load and unload packages at the designated <u>parking locations</u>.

Unannounced couriers report via the intercom to the reception Center Court and will receive the necessary safety instructions for entering the campus. Unannounced couriers with no receiving party receive no access to the campus.

Couriers with permanent employees on BCC need to request a permanent company badge for own employees via the <u>Brightlands Access</u> Portal.

5.1.2 Permanent company badge

BCC supplies permanent company badges for various target groups on campus, i.e. employees of campus tenants, students and contractors. The badges are supplied by BCC with a registration in AEOS and, if applicable, Salto for access to a building or compartment of a building.

Each organization (tenants, knowledge institutes, companies) is responsible for registering of their own employees in the Brightlands Access Portal.



The campus supplies 3 types of permanent company badges:

- Tenant badge: For employees of companies that are housed on BCC.
- Student badge: For students of knowledge institutes and educational institutions that are housed on BCC.
- Contractor badge: For employees of companies who regularly work for BCC or one of the tenants or for the duration of a project.

A permanent company badge is applied in the <u>Brightlands Access Portal</u> by a key user of an organization that is housed on BCC. A key user is an authorized person from an organization on campus who registers own employees for a permanent company badge. If employees already have a permanent company badge, the key user is authorized to request and renew authorizations.

After applying for a new permanent company badge, the employee will receive an email with the request to follow the campus access instruction and upload a passport photo. When successfully completed the campus access instruction, the employee will receive a second email with an E-ticket and QR-code for access to the campus on the first working day. The QR-code is valid for 7 consecutive days. Employees can receive their permanent company badge at the reception Center Court. The QR-code will then lose its validity.

Key users of companies must upload an employer's statement when applying for a permanent company badge for their own employees. Permanent contractor badges must be picked up at the reception Center Court before starting work. It is not allowed to perform work on an E-ticket with QR-code.

Additional information is required for badge applications for employees outside the European Union: Work permit/residence permit/visa and copy of passport or ID.

For questions and exceptions, you can contact the BCC SHE&S department.

5.2 Access with vehicles, parking policy

Drivers of vehicles and any passengers need to register themselves when passing the barriers (in and out), using a permanent company badge and for visitors using a QR-code.

5.2.1 General rules

The 1994 road traffic act applies for the entire campus grounds. The maximum speed limit is 30 km/h, with an exception for the shared space zone, this is a pedestrian zone that is also accessible to cyclists and destination traffic. Here, it is only allowed to drive at walking pace.

Reverse parking is compulsory in all <u>parking locations</u> that are suitable for this, with the exception of P10 for visitors, P8 for tenants/contractors/visitors, MIVA (parking location for disabled persons) and logistics parking locations.

It is not allowed to park on/along the roads or in the shared space zones of the Campus.

5.2.2 Rules per target group

Visitors who are in possession of an E-ticket with a unique QR-code are allowed to park their car in the parking locations:

- P10: The parking location on Campus for visitors and is equipped with 3 E-charging points for visitors and 1 MIVA parking location.
- P5: Parking P5 offers parking for visitors.
- P8: Parking P8 offers parking facilities for visitors and is equipped with 10 E-charging points.

Couriers must be registered as a 'visitor' in <u>Facilitor</u>. Unannounced couriers report via the intercom to the reception Center Court and will receive the necessary safety instructions for entering the campus.



For **tenants** dedicated parking locations apply:

- P1: Parking location P1 is a dedicated parking location for the tenants Sitech and Lonza. If this parking location is full, Sitech tenants must use parking location P2 and Lonza tenants parking location P5 or P8.
- P2: Parking P2 provides parking for all target groups.
- P3: Parking location P3 is a dedicated parking location for the tenants Sitech and Isobionics. The dedicated parking locations are personal parking locations.
- P4: Parking location P4 is a dedicated parking location for the tenants Arlanxeo and their visitors.
- P5: Parking location P5 offers parking facilities for visitors and tenants.
- P6: Parking location P6 is dedicated for tenants of the building 111-014-017-018-019.
- P7: Parking location P7 is dedicated for the tenants of building 111-017 and visitors to building 111-014-017.
- P8: Parking location P8 offers parking facilities for tenants. This parking lot has 10 E-charging points.
- P9A: Parking location P9A is dedicated for MIVA.
- P9B: Parking location P9B is for Arlanxeo visitors and is reserved for the drop off/pick up of rental vehicles.
- PPA: Parking of a vehicles is only permitted in dedicated parking locations on the tenant's own landlord area or in rented parking spaces.

Students are not allowed to park their car on campus. Students must use parking location P2 to park their car.

For **contractors**, the following parking locations apply:

 P2: Parking P2 provides parking for all target groups.

- P3: Parking location P3 provides parking for contractors.
- P8: Parking location P8 only provides parking locations for contractors when using the E-charging points.

5.2.3 Specific rules

Dedicated parking locations are allocated by name and are only intended to use in parking locations P10 and P3. Permission is granted by the BCC Site Manager.

MIVA parking locations are intended for disabled persons and are available on P9A and P10. MIVA parking locations can only be issued to persons with an official MIVA pass. The temporary use of a MIVA parking location can be granted in special circumstances by submitting an application to the BCC Site Manager. When using the MIVA parking, the MIVA pass must be visible behind the car's windscreen. Disabled persons with a MIVA parking pass are not allowed to park their car on a logistics parking location.

Bicycle parking locations are available at various locations on campus, whether covered. Bicycles must be placed in the relevant bicycle sheds.

Motorcycles must park their motorcycle in the motorcycle shed next to the parking lot P8 and/or P2. The motorcycle may also be placed in a parking location. Parking of motorcycles is not allowed in parking location P8.

Tenants on call in the PPA can park their car in front of building 122-045-046-047 and near building 122-024.

Logistical parking locations are only for contractors who carry out work and need to bring materials/tools with them in their vehicles. The Duty Officer can provide a parking location when the work permit is issued. The designated logistics parking locations are numbered and are issued by number. If work is carried out in a building with a logistics square,



parking may be done on the logistics square with the permission of the tenant.

Vehicles/buses/trucks higher than 3.80 meters cannot access the Campus via entrance Gate 2 and must use entrance Gate 1. Depending on the destination of the truck, the driver receives access to the Campus via the North gate (at parking P5) from the South gate and exits the campus via the East gate. Directions and a driver safety card are available at Gate 1. For questions, please contact the property manager infrastructure. For an event, the Event Officer can request permission for the temporary parking of bus transport between the building 122-170 and building 122-200.

The **E-charging points** at parking location P8 are dedicated for tenants/visitors/contractors who own an electric vehicle. A charging time of up to 4 hours is allowed. You can use the charging points via your own charging card. The user must arrange this charging card and must use this on an EV-box. Most charging cards are suitable for this. The consumption (kWh) is charged directly to the user. This is not done via the Brightlands Chemelot Campus organization.

5.3 Reception

Visitors are received and guided by a host/hostess. New employees are supervised and instructed by an employer housed on campus.

The regular opening hours of the campus are from 07:00 to 20:00 on weekdays. In the event of work/arrival outside these hours, please report to the Duty Officer. The presence of campus residents is registered via the entrance gates in AEOS.

The reception Center Court (building 122-200) is occupied from 07.00 to 18.00.

Filming and photographing in the open air and areas for general use is permitted on campus for non-commercial purposes. However, filming and photographing activities and/or installations at the adjacent Chemelot Industrial Park from the campus is not permitted.

The minimum age for access to the Brightlands Chemelot Campus is 16 years old (access via a badge system). In exceptional cases, an age limit down to 10 years is permitted, subject to the discretion of the BCC Site Manager. These young people (10-15 years) are always supervised and therefore do not move around independently on Campus. Extra attention is paid to specific instructions for these young people in appropriate and intelligible language maximum ensure self-reliance. accordance with site regulations, it is possible in specific cases to arrange exemption from the minimum age limits, subject to the discretion of the BCC Site Manager.

Security staff are permitted to search people on Campus and - if required - charge them.

5.4 Enforcement

The enforcement of the BCC parking- and access policy as described in chapter <u>5. Access</u> is carried out in accordance with the Site regulations, the compliance policy is carried out by Sitech Security.

A **violation** can be reported by any tenant to the Duty Officer or to the Gate 2 Security Officer. An enforcement is issued on behalf of the BCC <u>Site Manager</u>. When assessing the nature of the violation, camera images may be used from cameras that are set for the safety and security of BCC and personal property.

Persons **parking illegally** at BCC receive a note from Sitech Security behind the wiper of their windscreen with the request to report to the Security Officer at Gate 2. Sitech Security registers the license plate of the person that is



parked illegally and report this to the Security Officer at Gate 2. The Security Officer will speak to the person, followed by a report and with the possibility of a sanction in accordance with Site regulations and compliance. If an enforcement is not enough, additional measures can be taken, such as the installing a wheel clamp. When a wheel clamp is applied, the BCC organization is not responsible for any damage to the vehicle if the driver drives away with the wheel clamp still mounted. The driver of the car must report to the Duty Officer so the wheel clamp can be removed, and the license plate can be registered. If the Duty Officer is not available to remove the wheel clamp, the driver must take a waiting time into account. Access to the campus may be denied in the event of a repeated violation.

Unauthorized access to BCC through misuse of the access identification (permanent company badge, E-ticket), walking under or along the turnstile, or the barriers will be penalized in accordance with location regulations and compliance.

For questions regarding the enforcement of the parking- and access policy, you can contact the BCC SHE&S department.

6 Fire and other emergency situations

BCC is part of the Chemelot site and is therefore required to do the following:

- To describe physical company processes and to keep these descriptions up-to-date as part of the Chemelot safety report (VR).
- To keep, maintain and practice a BCC emergency plan as part of the (Chemelot) site emergency plan.

The BCC emergency plan includes all relevant information about the buildings on the Campus

that the fire service requires for appropriate emergency response. The BCC emergency plan is maintained by the Duty Officer and specifies the location of sprinkler systems, fire alarm systems, fire extinguishing systems, escape routes. But also: drawings of pipe networks containing toxic and flammable materials. Information about chemical storage and chemical registration from FindMolecule is also included.

For more information: contact the <u>Duty Officer</u> who maintains up-to-date fire-fighting plans.



7 Appendices

7.1 List of links to appendices

- Brightlands Access Portal
- <u>Campus Practice MoC & Acceptation Committee</u>
- <u>Campus Practice Management of Change</u>
- <u>Campus Practice Lock-Out Tag-Out Try-Out</u>
- <u>Campus Practice Work permit</u>
- Campus Practice Application VCA duty
- Cleaning form
- <u>Drivers Safety instruction card</u>
- Electrotechnical Instructions Brightlands (EIB)
- <u>Facilitor</u>
- Generic Electrotechnical Instructions (GEI)
- Irregular discharges BCC on sewer IAZI
- <u>Life Saving Rules</u>
- Locations AED's
- Locations <u>assembly points</u>
- Location parking
- Locations <u>RDR</u>
- LMRA instruction
- Release form for placing gas canisters
- Siren Area 22
- SSVV course guide
- Safety card



7.2 List of functions and function-holders

Site Manager

Hugo Hendriks

BCC SHE&S departement

André van den Berg (Manager) Frank Ossebaar Annelies Vanderheyden René Schmeitz

PED experts

Wout Ludema (a.i.)

BCC rental administration

Marie-José Douven

Duty Officer Head of Commissioning Commander Campus (in case of incidents)

John Bloemen Rolf Koch Frank Lenssen Guus Maes Jean-Paul Mannens René Raes John Schreurs Peter Vincken

Day Officer

Jean-Paul Mannens

BCC person responsible for the electrical installations

Eric Elands

Onboarding

Els Feron

Maud Simons

Annelies Vanderheyden

Operations Manager Pilot Plants

Wout Ludema

Manager Building Services

Anieke Thomassen



Property Manager

Robert Hobus Marcel Görtzen Tom Huydts Frank Willems

Receptie Center Court

Babette Ballast Brenda Rutten

Servicedesk Brightlands

Kirsten van Herpen (Coördinator) Renée Gildeman Joanna Overgaauw Peter Sukel Marian de Haar Nadine van Kruchten



7.3 List of abbreviaties

ACC Alert & Care Centre

ADR Accord relatif au transport international des marchandises Dangereuses par Route

AED Automatic External Defibrillator
ALARP As Low As Reasonably Practicable

Arbowet The Dutch working conditions regulation (Dutch: Arbeidsomstandighedenwet)

ATEX ATmosphères EXplosibles
BCC Brightlands Chemelot Campus

BRZO Major Accidents Decree (Dutch: Besluit Risico Zware Ongevallen)

CCP Critical Control Point
CEO Chief Executive Officer

CO Head of Commissioning (Dutch: Chef Ontvangend)

COO Chief Operating Officer CSP Chemelot Site Permit

CU Head of Execution (Dutch: Chef Uitvoerend)

CvD Duty Officer (Dutch: Chef van Dienst)

DCO Direct Head of Commissioning (Dutch: Directe Chef Ontvangend)
DCU Direct Head of Execution (Dutch: Directe Chef Uitvoerend)

E.g. For example

EG Equipment Guideline

EIB Electrical Instructions Brightlands
ERO Emergency Response Officer

Etc. Et cetera

GEI Generic Electrotechnical Instructions

i.a Among other thingsJSA Job Safety AnalysisKm/h Kilometers per hour

LMRA Last Minute Risk Assessment

LoT License to Operate

LoToTo Lock-out Tack-out Try-out
MEP Mitsubishi Engineering Plastics
MIVA Disabled (Dutch: Mindervalide)

MoC Management of Change

P Parking area 5
PA Pressured air

PED Pressure Equipment Directive
R&D Research and Development
RAS Radioactive Substances
RDR Reasonably airtight rooms
RIE Risk Inventory and Evaluation

SHE&S Safety Health Environment and Security

SMEs Small to Mid-sized or Medium-sized Enterprises

SSVV Foundation Cooperation for Safety (Dutch: Stichting samenwerken voor veiligheid)

VCA Safety, health, environment checklist for contractors

VR Safety report (=veiligheidsrapport)

VTA Permit discharge (Dutch: vergunning tot afvoer)

WABO Dutch Environmental Permitting law
WM Dutch Environmental Management las



7.4 Key modifications

Publication date	Changes
30 August 2021	- Change ADR safety advisor 2.9 Traffic and transport
24 June 2021	- Addition ADR safety advisor 2.9 Traffic and transport
	- Textual changes for publication.
15 June 2021	 Change in authorized persons for connecting gas cylinders or pressure reducing stations (2.15.1 Gas canisters, 2.15.2 Pressure reducing valves). Change providing a LMRA train the trainer course (2.5.4 Last Minute Risk Assessment). Change validity old LMRA card and -instruction (2.7 Last Minute Risk Assessment). Change from 12 to 10 Life Saving Rules (2.6.5 Life Saving Rules). Addition of a chapter 4.3 Unexpected incidents. Addition of a chapter 4.4 Foreseeable irregularities in discharge patterns.
	- Textual changes for publication.
01 September 2020	 Duty Officer has moved to building 121-250. Adjustments requirements for (D)CO's. Training 2.5.6. operational management elements has been replaced by the VCA-vol. Update 7.2 list of functions and function-holders.
30 April 2020	Textual changes for publication.Updating of names, roles and tasks, hyperlinks.
30 Αμπ 2020	 Change in revise of campus regulations to once a year (1.5 Announcement and distribution). Addition of the different target groups for the Campus location (1.8 Security).
	 Addition of the Duty Officers function "Activation of emergency response officers" (2.2 Functions). Addition of reporting accidents and incidents to the BCC SHE&S department and through which communication
	 channels (2.3 Reporting accidents and incidents). Change in procedure for access to the campus per target group. Addition of a safety onboarding for new tenants by BCC SHE&S department (2.5.2. Access instruction).
	 Change in the procedure for recognizing and activating emergency response officers at the campus location (2.5.3. Emergency response officers).
	- Addition of the responsibility for the Head of Execution of the main contractor for applying for a permanent access badge for own employees (2.6.3 Work permits).
	- Addition that smoking is generally prohibited on BCC (2.6.5 Life Saving Rules).
	 Change in access procedure to traffic and transport on campus (2.9 Traffic and transport).



	- Change in assessment of electrical installations and equipment in ATEX zoning and the management of reports
	(2.12 Zones with explosion hazards).Addition of the registration of a safety notification (3.2)
	Sounding the alarm).
	- Change in the siren alarm procedure (3.3 Siren alarm, 3.3.1
	Siren alarm: what now?).
	- Change in evacuation procedure. Addition of assembly
	locations on campus (3.4 Evacuation, 3.4.1 Evacuation: what now?).
	- Change of 5. Site access to 5. Access.
	- Change of the procedure 5.1 Access identification to 5.1
	Access identification, Addition 5.1.1 E-tickets 5.1.2 Permanent company badge.
	- Addition Parking policy in 5.2 Access with vehicles, parking
	policy with 5.2.1 General rules, 5.2.2 Rules per target group,
	5.2.3 Specific rules.
	- Addition 5.4 Enforcement policy for access and parking.
	 Addition of a list of links to appendices (7.1 List with links to appendices).
	- Change in the list of functions (7.2 List of functions and
	functions-holders) Addition of 7.3 List of abbreviations.
21 August 2018	- Addition of 7.3 List of abbreviations Adjustment consulting hours Day Officer for the request of
ZI August 2016	work permits and/or questions regarding work permits. The
	Day Officer is not present on Thursday. (2.6.3 Work permits)
	- Adjustment duration siren alarm and safety signal to 70
	seconds. (3.3 Siren alarm)
29 May 2018	- Addition of Chemelot Campus Practice 'application VCA
	duty' (2.5.1 VCA contractor personnel)
	- Assembly leader's obligation to work with an appeal list to
	determine if there are missing persons has been removed.
	Other means such as floor sweeping, access control, etc. can
	also be used. The employer / landlord is responsible for the
	implementation of the care for the employees that they are
	gathered in a safe place in a calamity situation (3.3 Siren alarm).
	- Clearer indication of the use of parking facilities for cars on
	the BCC (5.3 access with vehicles).
	- Designation of parking places where 'reverse parking' is
	compulsory (2.9 Traffic and transport).
	- Basic SCC (VCA) as training requirement for DCUs. In
	accordance with regulation 'The roles at the creation of the
	Site Work Permit' from the Chemelot Rules (2.2 Roles).
	- Replacing the Electrotechnical Operating Regulations (EBV)
	with the NEN3140 supplemented by Electrical Instructions
	Brightlands (EIB) and Generic Electrotechnical Instructions
	(GEI) (2.8 Electrotechnical Safety). Effective date of the new
	EIB GEI is 1 June 2018.



22 March 2018	 Procedure for the preparation of work permits where the Operational Center BCC has the role of Head of Commissioning added (2.6.3 Work Permits) Campus non-smoking area (2.13 Smoking, alcohol and drugs)
	 Filming and photographing of industrial park not permitted (5.2 Reception)
20 Sept 2016	 Follow-up on compliance by the BCC Site Manager in accordance with "Compliance policy with regards to regulations" guidelines (1.3 Monitoring and enforcement) Best practices for working risks are supported by the Brightlands Chemelot Campus Board and Brightlands Chemelot Campus Community Board. The landlords at the BCC are responsible for the implementation of the provisions (1.7 Working Conditions Act) The Campus has placed the security borders at the level of the buildings. Campus access control is solely focused on Safety and registration, not on security (1.8 Security) The Brightlands Chemelot Campus is a signatory to the location-wide complex permit in the context of the Nuclear Energy Act (2.16 Nuclear Energy Act) Minimum age for access explained further (5.2)
2 Sept 2016	 Requirements for Direct Head of Operations in labs. (2.5.6. operational management elements) Landlord point of contact for Head of Services/Day Officer if work must be carried out on building-related installations in the landlord area. (2.2 roles) Training requirements for "VCA-Vol "added for the Head of Operations, the Direct Head of Implementation, and the exceptional requirements for the Direct Head of Receiving in the lab rooms of the companies and institutes located on the Campus. (2.2 roles) Modification to description of landlord area for Head of Services on behalf of Site Manager in installations, buildings, roads & grounds with general functions and non-rented spaces. (2.2) Added roles for Head of Services: Issue, manage and monitor Campus residents via Safetel (with working alone) Authorized person with regards to request company passes and Permit for Discharge Monitor companies List of Last Minute Risk Analysis Instructors is available from the Head of Services (2.5.4) Life Saving Rules (LSRs) adopted verbatim from the
26 Aug 2016	Chemelot site Day Officer instead of Day Head



	Contractor instead of Company Staff
22 Aug 2016	Checking content, style and consistency; Assessment by specified people/departments, SHE&S consultation and Community Board
1 July 2016	 Integration of Chemelot Basic document, Campus Rules and Policy paper on Brightlands Chemelot Campus Site Regulations Minor changes in structure Changes in language and style to improve legibility Updating names, roles and tasks.