

2020

HMS#1494.7 Safety Rules for Contractors at Borregaard AS, ENG



EHS department
Borregaard Fabrikker Sarpsborg
05/11/2020

CONTENTS

- FOR EXTERNAL PARTIES AT BORREGAARD AS (BAS) 3
- INTRODUCTION: 6
- CHAPTER 1: SAFE MOVEMENT 7
 - Access 7
 - Requirements concerning personal protective equipment 7
 - General information about movement and conduct 9
 - Dangers 10
 - Local EHS regulations 11
 - We need your help 11
- CHAPTER 2: REPORTING AND FIRST-AID 12
 - Reporting 12
 - Evacuation 12
 - Immediate action and first-aid in various emergency situations 13
- CHAPTER 3: BASIC EHS 15
 - Borregaard’s life-saving rules 15
 - Execution of work and work equipment 16
 - Requirements concerning the use of protective equipment in different facilities and different situations 16
 - There are numerous hazards to be aware of at Borregaard 18
 - Never breach a physical safety barrier without approval 19
- CHAPTER 4: SAFETY TOOLS 20
 - Work permits 20
 - Safe job analysis (SJA) 20
 - Personal safe job analysis (PSJA) 21
 - Rescue plan 21
- CHAPTER 5: HOT WORKS 22
 - Requirements concerning hot works 22
 - Duties and responsibilities of the fire guard 22
- CHAPTER 6: CHEMICALS 23
 - Take precautions! 23
 - Mandatory personal protective equipment when working with equipment that may contain harmful liquids 24
 - First-aid and reporting: 25
- CHAPTER 7: ENTERING CONFINED SPACES 26
 - Planning associated with the entering of confined spaces 26

An entry permit must be obtained before entering confined spaces.....	26
The duties and responsibilities of the entry guard:	26
CHAPTER 8: WORK AT HEIGHT	28
Requirements concerning work at height	28
Requirements concerning the use of scaffolding.....	28
Requirements concerning the use of aerial work platforms/lifts	28
Requirements concerning the use of ladders	29
Requirements concerning the use of fall protection equipment.....	29
CHAPTER 9: ADR, TRANSPORT AND HANDLING OF DANGEROUS GOODS.....	30
Regulatory requirements	30
Requirements applicable prior to loading and unloading at Borregaard.....	31
DECLARATION.....	32

FOR EXTERNAL PARTIES AT BORREGAARD AS (BAS)

GENERAL CONDITIONS FOR WORK AT BORREGAARD PLANTS

- All work shall be carried out in accordance with Norwegian laws and regulations, this also includes meeting requirements concerning certificates and proof of competence.
- All personnel shall conduct themselves in accordance with BAS EHS regulations and emergency and reporting procedures.

Declaration. The content of this document shall be made known to and shall be binding on the part of the responsible representative of the company and any subcontractors through signatures. The chapters that are mandatory for your company can be found in the table below. The declaration can be found on the final page.

EHS training course. All personnel that will attend BAS sites must complete the BAS EHS training course (e-learning) in advance. This requirement shall also apply to the contractor's local work management. Please note that the course must be completed to gain access to the site.

The following EHS#1494 chapters and EHS courses are mandatory for your company

- Service personnel, Wood/woodchips, Consultants in office environments:
These people do not carry out physical work associated with operations and facilities. Examples include companies/personnel linked to coffee machines, carpet cleaning, wood and woodchip deliveries, IT consultants.
- Personnel/consultants: perform (physical) work linked to operations, process equipment and buildings/facilities. Requirements concerning work permits.
- Dangerous goods drivers: Transport and handling of Dangerous goods subject to ADR

Personnel	EHS#1494 Safety for external parties at BAS. Mandatory chapters	HSE course
<ul style="list-style-type: none">• Service personnel• Wood/woodchips• Consultants in office environments	<ol style="list-style-type: none">1 Safe movement2 Reporting and first-aid	EHS training courses for visitors
<ul style="list-style-type: none">• Personnel• Consultants at process facilities	<ol style="list-style-type: none">1 Safe movement2 Reporting and first-aid3 Basic EHS4 Safety tools5 Hot works6 Chemicals7 Entering confined spaces8 Work at height	EHS training courses for personnel
<ul style="list-style-type: none">• Dangerous goods drivers	<ol style="list-style-type: none">1 Safe movement2 Reporting and first-aid3 Basic EHS9 ADR, transport and handling of Dangerous Goods	EHS training courses for dangerous goods drivers, ADR

Assignment-specific EHS regulations. Work shall be carried out in accordance with the safety regulations applicable at BAS at all times. Prior to the work commencing, the contractor must contact the client's technical executive officer to obtain information about whether there are any special safety regulations applicable to the local site where the work will be performed or to the specific assignment.

ePSJA. Personnel must carry out risk assessments on their own individual work tasks linked to the work order by completing an electronic checklist of EHS items, known as the personal safe job analysis (ePSJA). This is available as an APP that personnel must download to their own mobile phones.

Requirements concerning certificates and proof of competence must be documented as met.

Appendix 1 *EHS#3148 EHS competence requirements for personnel - Borregaard* provides an overview of the EHS competence requirements that must be met and documented. Certificates and proof of competence must be brought in and presented upon request. Other proof of competence will be requested through random sampling.

Language. Clear and effective communication between external personnel and BAS personnel is essential to safety. All reporting in the event of an accident or incident will take place in Norwegian. In the event that workers who cannot communicate in Norwegian (or another Scandinavian language) are used, the contractor shall be responsible for ensuring that there is a person who is fluent in Norwegian and the foreign language in question present at all times who can act as an interpreter and who follows the work team. English may be used if this has been clarified with the BAS client and local personnel in advance.

Management, work equipment and personal protective equipment

- The contractor shall be responsible for providing its own local work management.
- The client's technical executive officer must be notified when work is started, halted and completed, so that the execution of the work can be followed up on.
- The person who signs work and access permits on behalf of the contractor must have the necessary authority. The BAS client's technical executive officer is responsible for ensuring that such authority is in place.
- The contractor shall be responsible for bringing the following equipment of the approved type:
 - Work equipment, tools and any emergency equipment such as portable fire extinguishers and rescue equipment.
 - All personal protective equipment such as workwear and protective clothing, helmets, protective footwear, goggles, ear defenders, fall protection equipment and gas masks with filters. Fall protection equipment must be subject to a documented inspection scheme and documentation must be presented upon request.
 - Helmets and workwear must be labelled with company name and/or logo

Follow-up on personal injury and dangerous conditions. In the event of injury or near-injury to the contractor's personnel during execution of work on Borregaard's site, or if the contractor's personnel observe dangerous conditions or actions, this must immediately be reported to the client's technical executive officer, who will ensure that BAS' procedure for reporting and investigation of such matters is followed.

Recording of non-conformities. BAS must be notified if the contractor records any non-conformities at BAS in its own non-conformity system.

Violation of EHS regulations

Any violation of the provisions will be recorded in a non-conformity report and it is therefore essential that the name of the individual and company name of the external party is provided upon request. Violation of the provisions may result in work being suspended and the company or individuals concerned within the company being barred from Borregaard.

EHS training course

Link to the EHS training course:

A link to the course should be received via e-mail. The link can be shared internally by the contractor and with any subcontractor(s).

URL(link):

https://borregaard.eu.crossknowledge.com/sso/connectOrRegisterLearner.php?register=yes&loginbox=yes&group_id=7&ts=2020-08-10T13%3A14%3A08Z-PT4320000M&hash=fa374071d7498af7dc401cb0ec88922935dad3180366d351066f3017eefccba13670e6b6e02bacb1f9a0003f4ca1f2d2fd43022496764f15df974910677c3a87

Implementation:

- Click "Sign up" and create a user account with your own password. Your e-mail address will be used as your username when logging in.
- It is possible to choose between Norwegian, English or Polish language.
- The participant must select the correct EHS training course themselves: Select the EHS training course listed as mandatory in the table above.
- Please note that the course has not been completed before you receive confirmation that the course has been completed at the end of the course.
- If you have any questions concerning the actual implementation of the e-learning course, please contact Safety Manager Lill Anita Johansen on +47 69 11 86 64.

Appendices

Appendix 1: EHS#3148 EHS competence requirements for personnel - Borregaard.

Reminder that the declaration can be found on the final page.

INTRODUCTION:

Safety always comes first at Borregaard.

This document describes Borregaard's safety objectives and general EHS regulations. The content is applicable to Borregaard's site and properties associated with Borregaard plants. Anyone who attends these sites has a responsibility to comply with the provisions. This document is available in Norwegian and English.

Borregaard's operation in Sarpsborg is a large and complex industrial site. It consists of a large industrial site with different plants and process areas with high levels of activity. Borregaard has a sharp focus on environment, health and safety and works continuously to become better in these areas.

Borregaard's objectives for safety are:

- zero personal injuries
- zero fires
- zero acute emissions

This places high demands both on us and on external parties who will be carrying out work within our sites. In order to achieve these objectives, it is essential that everyone who carries out work here acts with due care, is familiar with and complies with our safety regulations and reports any unsafe conditions that need to be followed up on.

Violation of the safety regulations will be addressed and could result in a ban from the company.

Borregaard's life-saving rules

The most important safety regulations at Borregaard are the life-saving rules.

The rules apply to everyone who attends Borregaard's sites. The life-saving rules are intended to prevent us from being exposed to situations that could result in serious personal injury or death. The rules must be treated with great respect. It is important that everyone who attend Borregaard's site complies with these rules.

BORREGAARD'S LIFE-SAVING RULES

1. Always ensure you have the necessary permission before entering confined spaces 
2. Release and secure energy when working on equipment (e.g. relieve pressure and disengage electricity) 
3. Never breach a physical safety barrier without approval 
4. Always be secured when working at height 
5. Always use the necessary protective equipment when handling chemicals 
6. Never pass beneath suspended loads 
7. Comply with requirements to hot work 
8. Do not breach the safety zones between vehicles and pedestrians without the go-ahead 

Your contribution is crucial!

HMS#1494.7 Safety Rules for Contractors at Borregaard AS ENG. Revised 05/11/2020

CHAPTER 1: SAFE MOVEMENT

Access

Borregaard's access control requirements

- The age limit for access is 14 years.
- The age limit for external contractors is 18 years.
- Persons under the influence of intoxicating substances are not permitted on site (zero tolerance for intoxication).
 - All use of medications labelled with a red triangle must be clarified with your manager or, in the case of external parties, the Borregaard contact person.
- You must have an access card in order to access the Borregaard site.

Your access card must always be used to record entry to and exit from the site. The access card must always be carried in such a way that it is always accessible. The card is personal and must not be loaned to others.

For external parties, access cards are requested by the external parties' contact person at Borregaard and must be collected at gate B and returned to the gate upon completion of the assignment. The external party will be charged in the event that cards are not returned.

If you are not familiar with the site, you must always be met at the gate by someone who is. For goods deliveries, this can be replaced by maps of the sites.

The following are not permitted to bring onto site:

- Alcohol and drugs
- Animals
- Weapons, ammunition and explosives

Vehicles

- Private vehicles without access permits must be parked outside of the site.
- All passengers of the vehicle must use the pedestrian gate.
- Gate B is the main gate.
- Gate C is intended for goods transport and machinery.
- Please note that the contents of randomly selected vehicles will be checked upon entry and exit.

Requirements concerning personal protective equipment

There are different requirements concerning clothing and protective equipment depending on assignment and area.

- Protective equipment must be worn both indoors and outdoors within the site.
- Each individual is responsible for arriving with the correct personal protective equipment.

In the plant area, the following is generally mandatory outdoors and indoors:

- protective helmets
- protective goggles with side shields
- *zipped/buttoned up* jacket and long trousers
- high-visibility jacket or vest (visibility class 1)
- protective footwear
- appropriate clothing and personal protective equipment for the assignment and area concerned

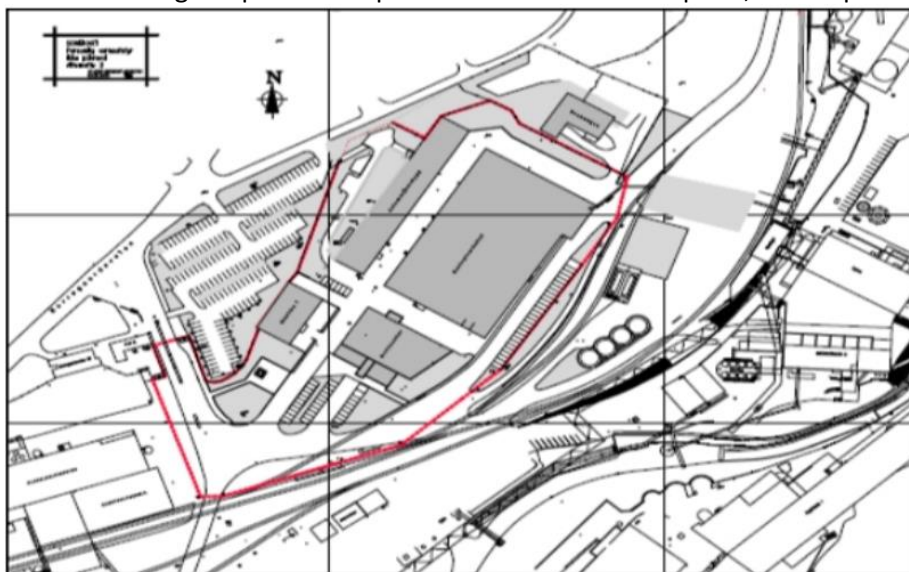
Please be aware:

- Borregaard employees must wear Borregaard workwear in the plant area.
- Permanent external carriers must bring their own protective equipment, other carriers may borrow protective helmets and protective goggles from the gate.
- External personnel must bring their own protective equipment and wear clothing carrying their company logo (also applies to helmets)
- External personnel who undertake physical work and personnel who will enter the plant environment must wear *protective clothing* such as robust work jackets and work trousers.
- Furthermore, when handling hot liquids or dangerous goods (ADR/RID), separate requirements concerning protective workwear must also be observed. This is addressed in later chapters.
- In EX zones, workwear and footwear that provide protection against electrostatic discharge must be worn. Static electricity occurs through friction and contact with and separation of materials and can be found everywhere. Workwear must be classified as antistatic in accordance with EN 1149-5 or made from natural materials (e.g. cotton/wool) and shoes must be ESD-approved. Symbols for classification of workwear with electrostatic/antistatic properties:



General conditions and areas covered by exemptions from the use of protective equipment and protective clothing:

- When travelling to and from the site at the start and end of working hours.
- In offices, control centres, break rooms, etc. when the rooms are in normal use. NB! The exemption does not apply if physical work will be carried out in these types of room, e.g. building and electrical works.
- For protective helmets in particular:
 - In laboratories and workshops/garages when the rooms are in normal use. Helmets must be available and used in connection with activities that could lead to head injury during the redecoration/repair of such rooms and always in workshops/garages. Protective helmets must always be used when constructing such rooms.
 - In work machinery with enclosed operator cabs.
- For protective goggles in particular:
 - In work machinery with enclosed operator cabs.
- In the outdoor non-protective zone around the operations centre:
The zone runs from gate B and is naturally delineated towards the plant area along the railway track and along the pedestrian path outside the chlorine plant, see map:



There are signs clearly showing the boundary of the exemption towards the plant area. **NB! The exemption does not apply to those carrying out work in this area or those carrying out work in**

or adjacent to the railway track. In these cases, the same rules for protective equipment apply as described for the plant area in general.

Conditions applicable to employees only:

- Employees attending meetings or other similar activities in their free time, at which exemptions to the use of protective equipment prevail, are exempt from the requirements. For example all-day courses at the Knowledge Plant
- For employees who are visiting the plant area to participate in meetings or other similar activities, there are exemptions from the use of Borregaard work trousers. (Does not apply to visits inside the production facilities)

Conditions applicable to external parties only:

- External parties must present their personal protective equipment to the inspector at the gate when they collect their access cards.
- External drivers/personnel with brief and straightforward goods transport assignments or inspections on site – and who will not perform physical work – are encouraged to wear protective footwear, but other suitable footwear may also be used.
- The requirement for long-sleeved tops applies to visitors (i.e. the use of tops that correspond to a zipped/buttoned up jacket is permitted) depending on the area they will be visiting.

The EHS manual contains a separate document that describes the procedure for decisions relating to exemptions and an overview of applicable special exemptions.

General information about movement and conduct

Miscellaneous restrictions:

- Smoking (including e-cigarettes) is only permitted in designated outdoor areas. Ashtrays must always be used.
- The use of headsets/earbuds or similar with sound is not permitted on site.
- It is not permitted to sleep or stay at the site overnight.
- It is not permitted to use roller skates, skateboards, self-balancing two wheelers or similar.
- Bicycles and mopeds must not be used in slippery/icy conditions. Take special care when moving around. This also applies to Borregaard's car parks and areas outside the site. The Borregaard transport department clears snow from/salts/grits shared roads and areas. In addition, everyone should help sprinkle sand on any icy sections using sand from our many sandboxes.
- Photography and filming are not permitted without a special permit.

All photography on site is subject to permission from the communications department, plant director, technical director or someone authorised on their behalf. With regard to internal employees and photography for technical documentation in projects, operations and maintenance for internal use, there is a general exemption from the requirement to obtain permission, provided the images cannot be deemed to contain sensitive information. Examples include pump wheels, valves, tag signs or similar that cannot provide comprehensive information to any potential third parties. The exemption does not apply to external parties. Permission must always be obtained from the technical director/production director or a person authorised by them if sensitive process equipment or other information will be photographed. Permission must always be obtained if there is any doubt as to whether what will be photographed may be classified as sensitive information. All photography for external use requires permission from the communications department/plant director.

Use of vehicles

- The maximum speed limit is 30 km/h. Pay close attention to signage. Please note that the right of way for traffic coming from the right applies at all intersections and parking must take place only

in designated spaces. Improper parking outside of designated parking spaces may result in the vehicle being towed away at the owner's expense. Borregaard accepts no responsibility for damage caused to vehicles in the event of improper parking or movement in areas where vehicle traffic is not permitted.

- Motorcycles are not permitted on site.
- Unnecessary use of forklift trucks is not permitted: forklift trucks must be used only in connection with work assignments. Passengers are not permitted in forklift trucks unless equipped with a passenger seat.

Restrictions on movement

All movement in process facilities must be justified, movement should only take place in areas linked to the work assignment.

It is a mandatory requirement to register in the visitor's log in the local control centre before proceeding further into the facility.

The purpose of registering personnel entering and exiting the site is to ease the work associated with search and rescue situations in the event of adverse incidents/evacuation situations. External and internal parties whose everyday workplaces are not in the facilities in question (maintenance operators, persons from other departments, external visitors and external parties) must register. Personnel must sign in and out at the start and end of the working day, at least once a day.

Dangers

Outdoor movement

- Pay attention to large vehicles
- Borregaard has its own locomotive and railway tracks run through the site. The railway tracks have traffic lights but not everywhere has barriers. Everyone must give way to the train.

Follow the three life-saving rules

- *Never breach a physical safety barrier without approval.*
A physical safety barrier on site can be area barriers and barriers in front of trains
- *Never pass beneath suspended loads*
- *Do not enter the safety zone between vehicles and pedestrians without approval.*
Do not get too close! Pay attention and be careful when moving around on site. Establish eye contact with other road users.

Process equipment

Process equipment may contain hazardous chemicals, hot liquids, cold liquids or steam and high pressure Surfaces may be hot or cold and may have moving parts.

EX zones

EX zones are areas with potentially explosive atmospheres as a result of gas or dust. Visits to EX areas (fire and explosion risk) are subject to special requirements concerning clothing, mobile telephones and equipment. It is not permitted to carry sources of ignition in EX zones.

Miscellaneous dangers

For the safety of yourself and others, you must respect physical safety barriers such as cordons, warning lights and barriers.

Local EHS regulations

Borregaard consists of several different areas and each area is subject to local EHS regulations. Local EHS regulations provide information about specific hazards and how you can safeguard yourself against these. The information is available locally - you must familiarise yourself with the information before signing the visitor's log.

Please be particularly attentive to the fact that certain facilities require respiratory protection: gas masks – you must be familiar with the use of gas masks before entering:

- The chloralkaline plant and associated sites where gas may occur.
- SO₂ facilities and associated sites where gas may occur
- Digester houses / acid plants and associated sites where gas may occur.
- The cellulose bleachery and associated sites where gas may occur.
- The ethanol plant and associated sites when cleaning with nitric acid is in progress.
- In Fine Chemicals (Pharma) when campaigns with requirements concerning gas marks (signposted) are running
- In "Miljøfabrikken", both indoors and outdoors.
- BALI
- Lignin; special line 2

Any personnel covered by the requirements concerning gas masks must be trained in how to put them on and use them. The filter cartridges must be mounted and the mask must be clean and ready for use at all times. Unless otherwise specified, the filter must be a combination filter marked ABE(*K)P3 (*+ possibly K for ammonia). Filter cartridges must be replaced as needed after use and when the expiry date is reached.

Airstream masks may replace full gas masks and must be used as prescribed in local EHS regulations.

Ear defenders

Must be used in areas where indicated by signage.

Ear defender dispensers must be placed near main entrances and in control centres for signposted noise zones. Ear defenders must also be worn for noise-generating work operations.

We need your help

Intervene if you observe or experience dangerous conditions and make a report: the matter must be recorded as a non-conformity. Never expose yourself to danger.

References to the Borregaard EHS manual:

Procedure for access

Specification of the procurement, use and maintenance of personal protective equipment

Local EHS regulations for the facilities

Guidelines concerning the use of medications at work and Policy concerning the use of intoxicating substances and gambling at Borregaard Sarpsborg.

CHAPTER 2: REPORTING AND FIRST-AID

An emergency situation may refer to, amongst other things, major and minor accidents associated with personal injuries, fire, emissions. Borregaard has a dedicated emergency response centre that is staffed 24/7. Borregaard has a speaker system in place to send alerts about important messages. Alerts are sent in Norwegian.

Reporting

In case of emergencies, you must:

- 1. Call the emergency response centre (+47) 69 11 88 88**
- 2. Initiate first-aid**

The emergency response centre will then notify the emergency services as required and will guide them to the correct location. It is therefore important that you can describe where at Borregaard you are located.

When you have notified the emergency response centre, emergency responders will arrive at the location of the accident to assist within a short period of time. You are obliged to accept assistance. (An ambulance may also be requested directly by phoning 113, but the emergency response centre must still be notified immediately).

Any accidents resulting in damage to vehicles, buildings, gates, fences, etc., must be reported immediately by phoning +47 69 11 89 00.

You must always be prepared for an emergency situation to occur.

It is therefore essential that you familiarise yourself with

- the nearest exit/emergency exit
- the designated assembly point in the event of evacuation
- the nearest emergency shower
- where the manual fire alarm and fire extinguishers are located
- the nearest mask cabinet containing gas masks.

Cabinets containing gas masks for use in emergency situations/evacuations are located near exits. (Breaking of the mask cabinet seal must always be reported to gate B).

NB! All alerts in connection with emergency situations will be issued in Norwegian. For external and internal employees who are unable to communicate in Norwegian/other Scandinavian languages, there must always be a person present who is able to act as an interpreter.

Evacuation

You must leave the area immediately and take the quickest route to the designated assembly point* in the event of a fire alarm or gas leaks. In the event of evacuation, please note that:

- Important messages will be sent via the speaker system. Listen and follow the instructions.
- Do not leave the assembly point before this has been clarified with the member of staff responsible for registering personnel.
- In the event that the entire site needs to be evacuated, everyone must exit using the closest gate and move to a communal assembly point off site. Industrial protection personnel will conduct registration of all personnel present.
- NB! Lifts must not be used in the event of fire or gas leaks!

(*Please note that there may be a change in assembly point in the event of gas leaks).

Immediate action and first-aid in various emergency situations

In the event of chemical spills/spillage on equipment and to the surroundings

- Make those around you aware of the situation and notify the emergency response centre on (+47) 69 11 88 88.
- Contact local operations personnel and cordon off the area.

Chemicals/hot liquids on the body/in the eyes

- Attract the attention of those around you and notify the emergency response centre on (+47) 69 11 88 88.
- Rinse immediately using large amounts of water: Use the closest emergency shower and rinse for at least 60 minutes.
- The emergency showers are equipped with alarms that alert emergency responders.
- Continue rinsing until emergency responders or medical staff tell you that you may stop.

In the event of gas leaks

- Make those around you aware of the situation and notify the emergency response centre on (+47) 69 11 88 88.
- Put on a gas mask.
- Immediately retreat from the gas-infected area. Be aware of the wind direction. Walk crosswind as much as possible.
- Unless otherwise stated:
 - In the event of outdoor gas leaks: Consider retreating indoors. Move to closed rooms on the top floors. Shut doors and windows and turn off ventilation.
 - In the event of indoor gas leaks: Evacuate the building and retreat from the gas-infected area.

Inhalation of gas (gas exposure)

- Attract the attention of those around you and call the emergency response centre on (+47) 69 11 88 88.
- Bring the injured person out of the gas-infected area without becoming exposed yourself. It is important to ensure that the injured person gets fresh air and peaceful surroundings. Remove contaminated clothing. Showering may be necessary. The injured person must be placed in a half-sitting position and wrapped in wool blankets.
- Initiate CPR if the injured person is not breathing. Please be aware that the injured person may have gas in their lungs.
- Administer medical oxygen.
- Alternatively, call 113 for advice.

NB! Please be aware that everyone has a duty to report all gas exposure to the emergency response centre. Contact the emergency response centre if you are uncertain whether you have been exposed to gas. Damaging effects of gas exposure may develop for several hours to a day following gas exposure. Anyone who has been exposed to gas must be examined by a physician.

In the event of fire

- Report: Make those around you aware of the situation and notify the emergency response centre on (+47) 69 11 88 88. Trigger the manual fire alarm.
- Rescue: Evacuate people.
- Extinguish: Attempt to extinguish the fire without exposing yourself to risk. Evacuate yourself.

Have you come into contact with something but you are unsure what? Assume that all liquids are hazardous chemicals Please note that chemicals may look like water. Serious injury may occur if your skin has been exposed to chemicals. Gases can also be irritating or corrosive to skin. It may take a long time before you notice any irritation.

Additional precautions:

- Assume that all liquids are hazardous chemicals.
- Take the time to shower and change into clean clothes if you subsequently discover that you have come into contact with liquids, gas or powder during your visit.
- Notify the emergency response centre on (+47) 69 11 88 88.

Contact local personnel if you are unsure about chemicals and gases.

Electrical accidents

Call the emergency response centre immediately on (+47) 69 11 88 88 if you are exposed to an electrical accident. All personnel are obligated to report any electrical accidents to the emergency response centre. Contact the emergency response centre if you are uncertain whether you have been exposed to electric shock.

Injured persons who meet the following criteria (in accordance with the electrical regulations) must be brought to hospital immediately following necessary first-aid:

- Exposure to high voltage
- Exposure to a lightning strike
- Exposure to a low-voltage power flow which probably went through the body
- Unconsciousness or confusion immediately after the accident
- Burns
- Signs of nerve damage (e.g. paralysis)

Cardiac arrest

- Attract the attention of those around you and call the emergency response centre on (+47) 69 11 88 88.
- Initiate CPR
- Use a defibrillator, emergency responders carry defibrillators in their duty vehicle
- Borregaard has four defibrillators
 - immediately inside the main entrance of the operations centre
 - in the on-call emergency response manager's vehicle (emergency response personnel)
 - in the production manager's vehicle
 - in the FA07 (Fine Chemicals) control centre

Borregaard's EHS manual contains separate procedures for the management of emergency situations, emergency preparedness and industrial protection.

CHAPTER 3: BASIC EHS

Special reference is made to the regulations concerning the performance of work, use of work equipment and related technical requirements. The purpose of the regulations is to ensure that the regulations concerning the performance of work, use of work equipment and related technical requirements are implemented safely so that employees are protected from risk to life or health.

Borregaard's life-saving rules

Your safety at the forefront

At Borregaard there are a number of hazards that could have major consequences. Both our and your attitude to safety are therefore crucial.

Our process equipment contains high levels of energy in the form of hazardous chemicals, pressure, temperature, electrical energy and vibrations. Certain areas may pose fire and explosion risks.

Safe working conditions require us to react when we experience dangerous situations and incidents. All harm to persons or property or situations that you perceive as dangerous must be reported immediately so that the risk can be reduced.

Borregaard has a set of life-saving rules that will prevent our employees, contractors and others from being exposed to situations that have the potential to take lives. The life-saving rules constitute the final barrier to preventing a *serious injury or fatal accident*. The life-saving rules apply to everyone at Borregaard's sites.

BORREGAARD'S LIFE-SAVING RULES

1. Always ensure you have the necessary permission before entering confined spaces 
2. Release and secure energy when working on equipment (e.g. relieve pressure and disengage electricity) 
3. Never breach a physical safety barrier without approval 
4. Always be secured when working at height 
5. Always use the necessary protective equipment when handling chemicals 
6. Never pass beneath suspended loads 
7. Comply with requirements to hot work 
8. Do not breach the safety zones between vehicles and pedestrians without the go-ahead 

What should you do if you see someone violate a life-saving rule?

Say something! Let the person you see know that they are violating a life-saving rule and get them out of the dangerous situation. Explain why you perceive the situation to be dangerous.

The reason why this sort of violation occurs must be clarified through investigations regardless of whether an accident or injury has occurred. This is because we need to both learn and establish measures to prevent

the situation from occurring again. In order to ensure such follow-up, you must inform the person's manager or contact person and the breach must be reported in the non-conformity system.

Execution of work and work equipment

Requirements concerning the use of work equipment

For work equipment that requires special care during use, there are requirements concerning mandatory safety training in the use of the work equipment in question (associated hazards and protective devices). Always ensure that protective devices are intact during use.

Examples of work equipment that is normally considered to require special care during use can be found at arbeidstilsynet.no as comments on Section 10 of the regulations concerning the performance of work.

The manager must appoint a suitable instructor for specific work equipment and training must be documented.

Perform your trade safely

Be aware of how you position yourself when working to avoid crushing, hitting or cutting yourself. Think about where you place your legs so that you do not stumble or slip. Keep the area around you tidy.

Please be aware that the use of tight-fitting protective goggles is required:

- when using tools that emit sparks, such as angle grinders and cutting discs.
- when performing work that emits particles that could damage the eyes, e.g. sand and dust.

Maintain job performance quality

It could have grave safety consequences if our process equipment was to fail. Your job performance contributes towards the reliability of our equipment!

Tidiness

Good order and cleanliness are basic and essential for good EHS. But why is it so important?

- To reduce the risk of injuries from falling or tripping.
- To reduce the risk of fire.
- To reduce the risk of chemical spills.
- To foster a positive working environment.

Please be aware that there are safety zones of five metres around all pipe bridges on site. This area must always be kept neat and tidy and nothing may be placed in this area without prior permission.

Requirements concerning the use of protective equipment in different facilities and different situations

Your personal protective equipment

You are responsible for attending wearing the correct protective equipment - ensure that your protective equipment is in order, ready for use and that you know how to use it correctly. Ask for advice if you have any doubts.

- You must familiarise yourself with the mandatory personal protective equipment in accordance with local EHS regulations for the facility/site you will be attending.

- You must familiarise yourself with the personal protective equipment that is mandatory for the work you will be performing. This will be specified in the work permit and/or safe job analysis.

Heat or chemical-resistant protective equipment:

Harmful media include hot, cold or corrosive liquids, powders, gas and steam.

Appropriate protective clothing must be worn when equipment may contain harmful media:

- Chemical and heat-resistant fabric gloves and boots (primarily made from rubber)
- Tight-fitting protective goggles that protect the eyes.
- Tight-fitting gas mask that protects respiration, eyes and the skin on the face.
- Face shield/visor that provides some protection for the skin on the face (please be aware that visors do not provide adequate protection for the eyes – tight-fitting protective goggles must be worn under the visor).

Respiratory protection:

- In certain facilities, it is generally mandatory to bring/use full gas masks, see the chapter on safe movement and local EHS regulations.
- Gas masks are required for work activities where you may be exposed to gas.
- Gas masks are mandatory when opening process equipment that has contained or may contain harmful chemicals, gas or powder.
- Always put your gas mask on if you notice a smell. This applies regardless of whether you know the cause of the smell. It could be the start of a leak/spill.

Other requirements concerning the use of gas masks and requirements concerning the use of compressed air are described in local EHS regulations.

Anyone covered by requirements concerning mandatory use of gas masks must be trained in the use thereof. The filter cartridges must be mounted and the mask must be clean and ready for use at all times. Unless otherwise specified, the filter must be a combination filter marked ABE(*K)P3 (*+ possibly K for ammonia)

Tight-fitting protective goggles:

It is mandatory to wear tight-fitting goggles:

- when handling chemicals and hot liquids
- when using tools that emit sparks such as angle grinders or cross-cut saws
- when indicated by risk assessments, e.g. in connection with work that emits particles that could cause damage, such as sand and dust
- where signage specifies “Eye protection required”

Protective clothing when working with dust

Dust masks must be worn when performing work that generates dust when gas masks are not used as protection against possible exposure.

Disposable overalls must also be used for manual/open handling of classified chemicals. Disposable overalls must be worn once and turned inside out during removal to avoid potential exposure and must then be disposed of/destroyed after use.

Read more about protection against harmful media

- In the chapter on chemicals; *Mandatory personal protective equipment when working with equipment that may contain harmful media.*
- In the chapter on ADR, *transport and handling of dangerous goods* which applies to dangerous goods/ADR drivers.

Ear defenders

Ear defenders must be worn in areas where indicated by signage. Ear defender dispensers must be placed near main entrances and in control centres for signposted noise zones.

Fall protection equipment:

Work at height necessitates the use of fall protection equipment

- where permanent fall protection has not been established
- when using lifts

There are requirements for documented training in the use of fall protection equipment and requirements that the equipment has been documented as inspected and approved. Read more about this in the chapter on work at height; *Requirements concerning the use of fall protection equipment*

Exemptions from the requirements concerning personal protective equipment

The Borregaard Working Environment Committee has provided for certain specified exemptions from the requirements concerning personal protective equipment. Information about these exemptions is provided in connection with work permits, if relevant.

There are numerous hazards to be aware of at Borregaard

Here are the most important ones:

Hazards when working with process equipment:

When intervening in process equipment, there is a risk of exposure to the contents, temperature or pressure. Be careful and always remember to open the process equipment pointing away from yourself so that you are not struck by any of the contents.

Hazards in the event of unstable operation:

In the event of operational issues, shutdowns and during commissioning of installations that may emit gas, operations personnel must provide notification, if possible in advance, to personnel working on/around the site, as well as to the emergency response centre, in order for preventative measures to be taken. Notification times and the names of those who have been notified shall be recorded in the operations log.

If, as the person executing the task, you notice operational issues that are unsafe during work, you must immediately notify operating personnel. Work can continue when the matter has been resolved.

Hazards associated with electrical energy:

- Borregaard has guidelines in place concerning the use of electrical equipment in areas where the surroundings consist of metal and where you may experience electric shock. For example, metal tanks and metal pipe racks.
- Electrical installations at Borregaard have been designed to be operated by qualified electrical personnel. Trained personnel are considered qualified for the specific tasks they have been trained for. Untrained workers are therefore not permitted to make any interventions or perform any troubleshooting in electrical components and installations belonging to the company, such as attempts to directly activate fuses, motor protection, relays or reconnecting loose wires, nor simple tasks such as replacing fluorescent lamps/light sources. Fuse boxes and distribution cabinets that can be operated by untrained personnel must be risk-assessed and clearly labelled.

Hazards associated with work in EX zones:

- Areas that have been classified as EX zones are areas that have a potentially explosive atmosphere due to gas or dust.
- It is forbidden to bring sources of ignition into EX zones, this also applies to mobile phones.
- EX-approved work equipment must be used as well as workwear and protective footwear that protect against electrostatic discharge when working in EX zones.

Never breach a physical safety barrier without approval

Safety barriers isolate hazards from people and the surroundings. At Borregaard, there are both permanent and temporary safety barriers.

Examples of physical safety barriers:

- Temporary barriers. Barriers must be confined to the required area and labelled with the name and mobile number of the contact person.
- Railings
- Traffic controls such as warning lights and barriers
- Valves, flanges and blind covers are considered physical safety barriers when it comes to the exclusion of process sections.

Miscellaneous protection and safety devices:

- Valve guards
- Valve and flange guards Protective devices on work equipment
- Lock-out “lockout/tagout locks and equipment” Safety valves

The Borregaard EHS manual contains separate descriptions of violations of EHS regulations and the requirements concerning the use of protective equipment

CHAPTER 4: SAFETY TOOLS

Borregaard has safety tools adapted for different work assignments. Safety tools are mandatory and consist of forms that must be reviewed and signed. Through the correct use of safety tools, we document that risk assessments have been performed. We are now going to take a closer look at work permits, safe job analyses (SJA), personal safe job analyses (PSJA) and the rescue plan.

Work permits

The most important safety tool we have is the work permit.

Work permits are mandatory for all physical work assignments that are performed on site. Work permits describe the safety measures associated with the work assignment, as well as the requirements concerning personal protective equipment.

We distinguish between two main types: work permits for cold work and work permits for hot work

NB! Work permits must ALWAYS be obtained before starting work.

Procedure and accountability

1. Work permits are issued by the operator (client) at the external base for the site in which the work will be performed. Personnel must sign to show that the work permit has been received.
2. The client and personnel must review the work permit together. Everyone in the work team must, to the best of their ability, assess whether the necessary safety measures are adequate.
3. A copy of the work permit must be brought to the workplace.
4. When the assignment is complete, the final item of the work permit must be signed by the person with responsibility for ensuring that the area is neat and tidy and that the assignment is complete.
5. The work permit must then be returned to the operator at the external base. The operator must always be contacted in connection with the return of work permits.

Safe job analysis (SJA)

SJAs must be performed for all assignments for which the risks are unknown.

SJAs must be performed when

- established procedures and instructions are inadequate
- there are new and unfamiliar work activities
- the work activities are complex and/or high-risk
- several work teams are working together

SJAs must ALWAYS be used

- when undertaking work at height where physical fall protection has not been established through the use of railings or similar
- when entering confined spaces
- when performing complex lifting operations

It is mandatory for the following people to participate in the safe job analysis

- representative from operations/the client
- personnel
- EHS personnel can assist with the implementation of SJAs

Borregaard has separate instructions and a form available for the implementation of SJAs.

Personal safe job analysis (PSJA)

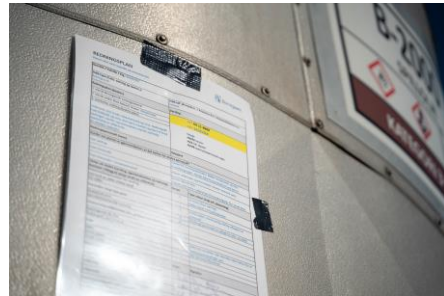
Take two minutes to safeguard job performance: you must conduct a personal risk assessment of your own work activities by completing a checklist of questions concerning risk and risk-reducing measures.

Rescue plan

Work assignments that require rescue plans are identified through SJAs. Borregaard has a separate template for rescue plans that must be reviewed and completed prior to work commencing. The rescue plan can identify the need for additional resources such as personnel and/or equipment that must be organised before the assignment starts.

The following people must participate in the preparation of rescue plans:

- someone from a management role in operations/the client
- personnel
- rescue personnel
- entrance guard for work that involves entering confined spaces



Everyone in the work team must sign to show that they have familiarised themselves with the content.

A well prepared rescue plan can save lives!

Borregaard's EHS manual contains separate procedures for safety tools.

CHAPTER 5: HOT WORKS

One of Borregaard's safety targets is 0 fires. A fire at the company could have extremely serious consequences and one of Borregaard's life-saving rules is "Comply with requirements concerning hot works". Hot works require thorough preparation beforehand and protection of the area whilst the work is being performed.

Definition of hot works

Hot works are works in which work tools/equipment that generate sparks and heat that could lead to fire are used. Hot works include the use of open flames, hot air, welding, cutting and grinding equipment, as well as the use of tools where the material may become hot.

Requirements concerning hot works

Competence requirements for hot works

Both the personnel performing the work and the fire guard must bring valid certificates for hot works issued by the Norwegian Fire Protection Association or partner organisations in other Nordic countries.

A "work permit for hot works" is a requirement.

- Important: All tools and equipment that will be used in the assignment must be specified when the work permit is issued.
- Special requirements apply to hot works in EX zones and on roofs.

Preventive measures must always be taken.

The most important safety measures are about preventing anything from igniting and these measures must be taken before the actual work starts.

The client and personnel will inspect the workplace together and will agree on the correct preventive safety measures.

- Ensure that you have a good overview of where heat may occur and where sparks may land.
- Remove or cover any combustible materials
- Cover openings in floors, walls and ceilings
- Moisten the surrounding area.

Requirements concerning extinguishing agents

Extinguishing agents from two different sources must be available on site:

- a minimum of 2 x approved 6 kg powder extinguishers
- one portable extinguisher can be replaced by a fire hose with water pressure all the way up to the jet tube

Remember! The work team must bring their own portable extinguishers for their assignment.

Fire guards are required

The work team must bring their own fire guard. If the work permit specifies that the risk is low, the personnel performing the work can also act as the fire guard.

Duties and responsibilities of the fire guard

Assess and reduce the risk of fire *before, during and after* the implementation of the work:

- The fire guard must be present and must monitor the workplace during breaks and for at least 1-3 hours after the work has been completed, unless otherwise set out in the work permit.
- The fire guard must not work on anything else.
- In the event of fire, the fire guard must call the Borregaard emergency response centre (+47 69 11 88 88) or trigger the manual fire alarm. The fire guard must attempt to extinguish the fire, unless this poses a danger.

The Borregaard EHS manual contains a separate procedure for hot works.

CHAPTER 6: CHEMICALS

Borregaard is a chemicals company!

At Borregaard, many of us work with chemicals every day. Hot, cold and harmful chemicals can cause serious personal injury. Switching on or opening process equipment may result in exposure to chemicals.

Take precautions!

Serious injuries will occur if we are not prepared. We need you to take the necessary precautions in order for us to have a safe working environment:

You must familiarise yourself with which chemicals and temperatures you may be exposed to through the equipment you will be working with, as well as the hazards you may be exposed to.

This information can be found:

- in the local EHS regulations for the facility
- in the SJA
- in the safety datasheet for the chemical in question
- in the work permit
- on the chemical labelling of the equipment



If you are uncertain, please ask the local operator.

Familiarise yourself with the hazard symbols and what they mean

HAZARD SYMBOL	TYPE OF HAZARD	EXPLANATION
	EXPLOSIVE	May explode as a consequence of fire, heat, shock or friction.
	FLAMMABLE	Flammable chemicals.
	GAS UNDER PRESSURE	Container contains pressurised gas.
	OXIDISING	Chemicals that are not necessarily flammable, but that can cause or help other materials to catch fire, normally by releasing oxygen.
	ACUTE TOXICITY	Acutely toxic – even small amounts can cause life-threatening poisoning or death.
	HEALTH HAZARD	May irritate the eyes, skin or airways. Relatively small amounts can cause chronic injury, poisoning or death.
	CORROSIVE	May cause lasting damage to skin, throat or eyes.
	SERIOUS HEALTH HAZARD	Can cause serious injuries.
	HAZARDOUS TO THE ENVIRONMENT	Substances that may harm the environment if discharged.

Release and isolate energy when working with process equipment

Equipment must be closed off and drained.

One of Borregaard's life-saving rules is ***Release and isolate energy when working with equipment.***

Borregaard's operations personnel are responsible for isolating energy and draining the contents of the process equipment. BUT: there is still a risk that chemical residues remain in the equipment.

Carefully open the equipment pointing away from yourself

Open the equipment pointing away from yourself so that you are not struck by any chemical residues from the equipment.

It is absolutely necessary to ensure that you perform the work in a safe manner in order to avoid coming into contact with chemicals.



Always use the required protective equipment when handling chemicals (Life-saving rule)

Always use the required protective equipment when opening process equipment.

Read the work permit to see what protective equipment is required for the job you are to perform.

Mandatory personal protective equipment when working with equipment that may contain harmful liquids

- Helmet
- tight-fitting protective goggles or gas mask or tight-fitting protective goggles and face shield
- gas mask

Chemical-resistant protective clothing:

- rubber jacket
- rubber trousers
- rubber boots
- rubber gloves

When using chemical-resistant protective clothing, the trousers must be worn *on the outside* of the boots.

Please be aware that liquids may get between sleeves and gloves.



First-aid and reporting:

IMPORTANT! Familiarise yourself with the location of the emergency shower before starting work.

If you burn yourself or are exposed to harmful or extremely cold chemicals, you must immediately rinse the affected area with plenty of water:

- Get into the emergency shower as soon as possible.
- Rinse for 60 minutes using plenty of water.
- When the emergency shower starts, an alarm is triggered to alert the emergency response personnel.
- Always notify the emergency response centre as well via +47 69 11 88 88 or call for help.

If there is no emergency shower in the immediate vicinity, you must use other options for rinsing, but it is crucial that you report the incident so that help is requested.

Use eye rinses or face showers if you need to rinse your face and eyes. Face showers can be found next to the emergency shower.

You must continue rinsing until help arrives.

Emergency responders will stay with you and will call the external emergency services, if required.

Borregaard's EHS manual

Borregaard has separate procedures in place to manage chemical safety and these procedures include Safety datasheets and chemical card index, pipeline labelling, containers and tanks, etc.

CHAPTER 7: ENTERING CONFINED SPACES

Planning associated with the entering of confined spaces

Definition

Entering confined spaces means completely or partially entering equipment and narrow spaces or enclosed areas. This could include:

- tanks and containers
- silos
- large pipes
- boilers or wastewater systems
- manholes, closed culverts, trenches, etc. deeper than 1.3 metres.

Other work assignments and workplaces where access and rescue are challenging may also require entry permits. Examples include working high up in tanks or work platforms without general access.

Preparation is required before entering confined spaces

Borregaard's life-saving rule for entering confined spaces says ***Always obtain the necessary permit before entering confined spaces***

An entry permit must be obtained before entering confined spaces.

The entry permit must document that safety measures for entering confined spaces have been taken: Entry meeting, SJA, rescue plan, gas measurements, entry guard.



- The client (Borregaard) is responsible for issuing entry permits, implementing safe job analyses (SJA), organising entry meetings and for ensuring that a rescue plan is in place prior to entering confined spaces.
- The rescue plan must be visible at the entrance to the object that will be entered.
- Please be aware that the SJA and rescue plan may identify a need for additional equipment, additional staffing and additional expertise.
- The work team must bring their own entry guard.



The duties and responsibilities of the entry guard:

No entry without an entry guard! The task of the entry guard is to ensure safe entering of confined spaces.

The entry guard must:

- wear a vest labelled "entry guard"
- remain just outside the entrance at all times when confined spaces are being entered
- communicate with those who enter confined spaces and, in emergency situations, notify the emergency response centre
- visually monitor the work and the surroundings

What should the entry guard do in the event of an emergency situation?

Start by notifying the emergency response centre on +47 69 11 88 88 so that help arrives quickly – then initiate first-aid and the measures specified in the rescue plan.

The entry guard must not leave the object to get help or enter the tank.

Those entering confined spaces or who are entry guards have a responsibility!

Those entering confined spaces or the entry guard must:

- actively participate in SJAs and sign to show that you are familiar with and take responsibility for safety measures.
- actively participate in the preparation of the rescue plan and sign to show that you are familiar with and responsible for emergency preparedness measures.
- sign to show that the contents of the entry permit are familiar and understood.

Vital measures when entering confined spaces:

When entering confined spaces in objects made from steel and metal, you may be exposed to electrical currents if you are working with electrical equipment. Additional safety measures are therefore required. There are, among others, requirements concerning the use of isolation transformers and approved electrical equipment must be used.

There are requirements concerning measuring of oxygen and harmful gases:

When working inside the confined space, it is important to ensure that the air you breathe has the correct concentration of oxygen and that there are no harmful gases present. Measurements must be taken before and during the work.

Prior to entering confined spaces, gas measurements must be performed by an approved Borregaard operator. Subsequent gas measurements must be performed by trained personnel from outside the confined space and documented using a separate gas measurement form.

Work permits, entry permits and gas measurement forms must be brought to the workplace and the rescue plan must be clearly visible on site

Borregaard's EHS manual contains a separate procedure for entering confined spaces.

CHAPTER 8: WORK AT HEIGHT

Borregaard's life-saving rule says ***Make sure you are always secured when working at height.***

Definition of work at height

At Borregaard, we define work at height as all work more than 1.25 metres up.

Requirements concerning work at height

Statutory requirements are described in the Norwegian Working Environment Act's *regulations concerning the performance of work, use of work equipment and related technical requirements, Chapter 17 Work at height*. Please be aware that there are special requirements in place concerning competence when working at height. Competence requirements have been described in a separate document.

In general, the following applies:

- To the extent possible, strive to plan to avoid work at height.
- Fall protection must be in place when working at height.
- Collective fall protection (railings or similar) must be prioritised ahead of personal fall protection equipment.
- Scaffolding or lifts with fall protection are preferred work equipment for work at height.
- Tools and equipment must be secured against falling.
- Traffic must be blocked while work at height is being performed.
- When using scaffolding in areas where there is a risk of gas or when working at heights where rescue is difficult, stair towers must be used.

Emergency preparedness for work at height

In facilities where gas masks must be brought, the mask must always be kept in the immediate vicinity. We would like to emphasise the importance of being prepared for evacuation from height. Plan a safe escape route prior to work commencing. Keep the planned escape route clear.

Requirements concerning the use of scaffolding

- All scaffolding must be of an approved type and marked in accordance with the Norwegian Labour Inspection Authority's regulations. At Borregaard, the validity period from the approval date is 14 days and you are responsible for checking that the scaffolding is approved for the job that will be performed.
- You need to have approved documented training to build or modify scaffolding. Scaffolding must always be built in accordance with the installation instructions.
- You need to have documented user training for the type of scaffolding you will be using in order to use scaffolding.
- For the use of suspended scaffolding, specific safety training for the scaffolding in question is required.

Requirements concerning the use of aerial work platforms/lifts

- People may only be lifted using work equipment intended for the purpose.
- Fall protection must be worn in work buckets at heights above 1.25 metres (with the exception of scissor lifts) and when moving the lift (all types, regardless of height). SJAs must be performed in the event of any exceptions.
- If the user instructions for the lift require the use of other fall protection, the strictest requirements shall apply.
- In order to use a lift, you need proof of competence and documented safety training for the lift type you will be using, as well as documented training in the use of fall protection in the work bucket.

Requirements concerning the use of ladders

- Ladders should predominantly be used for access only. Work from ladders is not normally permitted.
The ladder must be secured against slipping and tipping over. Ladders must, to the extent possible, be secured at the top.
- Step ladders may be used for simpler work assignments that do not require the use of heavy equipment/materials/*force-intensive work*
Step ladders must have work platforms, railings on three sides and chains for back protection.

Requirements concerning the use of fall protection equipment

- *Approved equipment.* Fall protection equipment must be subject to a documented inspection scheme and the documentation must be presented upon request. Additionally, there is a personal responsibility to inspect your own equipment prior to use to ensure that it is intact and not contaminated. Modification of equipment is not permitted. External parties must bring their own fall protection equipment.
- *Documented training.* All use of fall protection equipment requires documented theoretical and practical training. The content and duration of the training will vary depending on work assignments. The training/course must have a duration of at least one full day. Requirements concerning practical experience will be assessed in the context of the degree of risk associated with the work assignment that will be carried out.

As a minimum, the course must include the following elements:

Theory:

- 1) Regulations
- 2) Falls and risks. Safety profile (reliability of barriers).
- 3) Equipment and method:
 - Anchoring and positioning
 - Fall prevention and fall arrest systems
 - Force-dampening components in fall arrest systems
 - Hoisting of equipment/securing tools
 - Inspection of equipment prior to use/recertification.
- 4) Buddy rescue

The practical training should take at least half a day and must include the elements in Items 3) and 4). Please contact the EHS department with any questions concerning courses and competence.

- *Fall-prevention fall protection equipment.* Always prioritise working with access restrictions.
- *Safe job analysis.* Safe job analyses must always be used in connection with work at height that requires fall protection equipment.
- *Buddy check prior to use.* Check that the equipment does not come into contact with heat or into conflict with tools or process equipment whilst the work is being performed.

Borregaard's EHS manual contains a separate procedure for work at height.

CHAPTER 9: ADR, TRANSPORT AND HANDLING OF DANGEROUS GOODS

Regulatory requirements

Dangerous goods drivers must be familiar with the requirements set down in the ADR/RID regulations and must have proof of competence in order to gain access to Borregaard. The same requirements apply to the crew on board the vehicle. Other passengers are not permitted.

You must bring your own protective equipment as required.

Emergency equipment

The following must be kept in the vehicle at all times:

- two fire extinguishers
- one stop block per vehicle
- eye protection and eye wash
- protective gloves for each crew member on board the vehicle
- two stable warning signals (cones, triangles or lights)
- high-visibility vests for the crew members
- one torch for each crew member

Marking

When transporting dangerous goods, it is important to ensure that the vehicle has hazard declarations and marking in accordance with the ADR/RID regulations. The transport documents must include:

- DANGEROUS GOODS in capital letters
- product name and packaging group
- the number on the hazard declaration
- empty or uncleaned packaging or tanks must be marked “empty packaging” as well as with the hazard declaration number

Personal protective equipment

One of the life-saving rules at Borregaard is ***Always use the required protective equipment when handling chemicals***

Handling of chemicals that are subject to labelling requires the use of personal protective equipment, depending on the chemical in question. When loading/unloading dangerous goods in accordance with class 8 of the ADR/RID regulations, the following protective equipment is required:

- tight-fitting protective goggles
- helmet
- face shield
- rubber trousers
- rubber jacket
- rubber boots with steel inserts
- rubber gloves
- gas mask must be brought

Please be conscious of keeping the trousers on the outside of the boots and be aware that liquid may get between sleeves and gloves.

During connection and disconnection of hoses, face shields must be worn in addition to tight-fitting protective goggles.

A gas mask must be worn as needed in accordance with requirements concerning open handling, e.g. sampling requiring that the vehicle inspection lid be opened.

Requirements applicable prior to loading and unloading at Borregaard

The following measures must be taken before you can load or unload at Borregaard:

- You must have proof of having completed the local safety training for the site/plant at which loading or unloading will take place.
- The instructions applicable to the loading/unloading site must be followed.
- You must bring and use the mandatory personal protective equipment.

When loading or unloading dangerous goods, it is important to ensure that the correct product and volume are filled.

The engine must not be left idling unless this is required to operate pumps or other aids. Keep an eye on hoses and connections and do not leave the vehicle unattended. If chemicals are spilled, the emergency response centre must be notified immediately on +47 69 11 88 88.

Borregaard's EHS manual contains separate procedures for the handling of dangerous goods and the compliance with the regulations for land transport of dangerous goods, ADR



Borregaard

DECLARATION

Company:.....

Business register no.....

Address:.....

I hereby declare that the provisions set down in "Safety for external parties at Borregaard AS" will be complied with and that our subcontractors will be made familiar with the contents prior to commencing any work at Borregaard. All of our own employees, as well as our subcontractors' employees, are aware that they must complete EHS training courses prior to attending Borregaard plants.

Date:.....

.....
Binding signature and stamp

.....
Please repeat the name using block capitals

We ask that this page be completed and signed and returned via e-mail to: vendor.master@borregaard.com