

08310 HSE conditions in outsourced work

1 Purpose

The purpose of these HSE conditions is to establish the minimum requirements for cooperation with third parties with regard to Health, Safety and the Environment.

2 Summary

These rules set out the minimum requirements for Safety, Health and Environment (SHE) that the Principal imposes on any contract activity undertaken by the Contractor and anyone whom the Principal engages in this regard if this contract activity is performed at a Work Location.

3 Definitions and abbreviations

3.1 Definitions

Principal:	Shin-Etsu PVC B.V.
Contractor:	(In-house) contractors and hired Subcontractors
Work locations:	The locations Pernis, Botlek and the pipeline routes managed by the Principal (including the adjacent quay and bodies of water, and port, loading and unloading facilities).
Emergency work	Unscheduled (unplanned) work that must be carried out immediately to prevent/limit (environmental) accidents, (environmental) incidents or substantial loss of production.

3.2 Abbreviations

SHE:	Safety, Health and Environment
RI&E:	Risk Identification and Evaluation
TRA:	Task Risk Analysis
PPE:	Personal Protective Equipment
VCA:	Safety Checklist for Contractors
VOL-VCA:	VCA training for operational managers
B-VCA:	VCA training for executive operational personnel
VCU:	Safety Checklist for Temporary Employment Agencies
SSVV:	Stichting Samenwerken Voor Veiligheid (Foundation for Cooperation on Safety)
LMRA:	Last Minute Risk Analysis
VC(M):	Vinyl chloride (Monomer)
EDC:	Ethylene dichloride, 1,2-dichloroethane
PVC:	Polyvinyl chloride

4 General

These conditions cover activities carried out on behalf of Shin-Etsu PVC B.V.

- a. Contractors are directly responsible for their own personnel and for hired (subcontractors') personnel. In the event of problems, accidents and/or incidents involving their own and hired personnel, the Contractor shall assign responsibility to the Principal and, where necessary, to the competent administrations (police, labour inspectorate, etc.) and collaborate fully in an investigation.
- b. Contractors shall observe the legislation applicable to them.
- c. Contractors shall operate in accordance with the arrangements concluded within the trade associations.
- d. If the Principal allows the Contractor to have the contract activity done in whole or in part by third parties, the Contractor remains responsible for informing the subcontractor about the applicable SHE Conditions for subcontracted work.

5 Certification

- a. Contractors shall be certified in accordance with the [VCA standard](#). Main contractors and enterprises employing more than 35 people must be VCA**-certified. Other Contractors must be at least VCA*-certified.
- b. Temporary employment agencies must be [VCU](#)-certified if hired personnel performs work outside the offices (non-administrative work).

6 Training courses

- a. VCA/VCU certification requires every Contractor to have trained/instructed his/her people in accordance with the identified risks from the RI&E.
The Principal specifies that Contractor personnel must have appropriate training as required by the RI&E.
For executive personnel, at least VCA Basis is required; managerial personnel must have at least the VOL-VCA diploma.
Where tasks covered by the High-Risk Work Training Guide (see [High-Risk Work Guide](#)) are performed, the Principal specifies that the personnel used must have the certificates set out in that guide.
- b. Pernis location: all safety training must be listed in the employee's Safety Passport. All of the Contractor's employees must be able to produce their Safety Passport upon request.
Botlek location: all safety training must be listed in the employee's Digital Safety Passport (DSP). All of the Contractor's employees must be able to produce their Digital Safety Passport upon request.
- c. If Shin-Etsu stipulates a Manhole Guard/external guard, the latter must be certified in accordance with the High-Risk Work Training Guide.
- d. In cases of class 1 'hot work' (such as welding, grinding, burning and/or open flame), an Industrial Fire Fighting certificate in accordance with ISO 17024 is mandatory. This applies in zoned areas.

7 Knowledge of enterprise-specific rules and conditions

- a. Every employee of a Contractor shall be familiar with the specific safety rules that apply at the Principal's locations. He/she shall for this purpose have watched at the least Deltalinqs' training

film Samen voor Veiligheid ('Together for safety') and must have achieved an adequate score on the associated test.

- b. Pernis location: the instruction must be stamped in the Safety Passport and may not be older than two years.
- c. Botlek location: the instruction must be included in the Digital Safety Passport (DSP) and may not be older than two years.
- d. Every contractor employee must be familiar with Shin-Etsu's Life Saving Rules (LSR). Contractor employees must watch the Botlek Business Park LSR instruction film and pass the associated test. Pernis location: the contractor may provide instructions. The SE contact person is responsible for administering the associated test.
- e. Botlek location: the instruction must be included in the Digital Safety Passport and may not be older than two years. Pernis location: after passing the test, the employee will receive a helmet sticker. The sticker may not be older than two years.
- f. Every employee of a Contractor receives a brochure setting out the safety rules at the Botlek and Shell business park. At Botlek, this publication is issued by the porter, and at Shell by the Pass Administration Department.
- g. Every employee of a Contractor shall be familiar with the additional Shin-Etsu safety regulations. The additional information is set out in the Shin-Etsu Pernis or Botlek Safety Booklet, which is received when the work authorization is issued – see also point b. A Contractor must have access to sufficient and correct information in order to be able to perform the work safely and properly. The work order must contain sufficient information. If the information is not sufficient to allow the drawing up of a sound work plan, the Contractor must contact the Commissioning Party.
- a. Any complex, unusual and/or risky activities must be discussed in advance. For high-risk work and for operational high-risk activities for which no standard TRA (S-TRA) is available, the minimum requirement is a so-called Work Plan with Task Risk Analysis (TRA). The Work Plan must be drawn up by the Contractor and the accompanying TRA is drawn up jointly by the Commissioning Party, the party issuing the work permit and the Contractor, the party applying for the work permit (see part 10, Implementation). The work, the related risks and the management measures to be taken to ensure acceptable risks must be described clearly and unequivocally. The TRA must be assessed by a safety expert of the Commissioning Party and the Contractor(s).
If required by the scale (number of people involved), the complexity of the work and/or the exposure of employees to specific risks (see annex 2 to Directive 92/57/EEC dated 24 June 1992), an HSE plan is also required. This applies for example to:
 - Projects in which the implementation phase amounts to more than 500 man days;
 - Work which puts workers at risk from chemical substances constituting a particular danger to the safety and health of workers or involving a legal requirement for health monitoring;
 - Work near high voltage power cables.
 - Work exposing the employees to the risks of burying, entrapment or falling;
 - Work carried out by workers in caissons with a compressed-air atmosphere;
 - Work involving ionising radiation requiring designated controlled or supervised areas.

The HSE plan must be drawn up in consultation with an expert working group. The working group must include at least the following representatives:

- project manager/foreman;
- subject specialist of the Commissioning Party.

The Contractor's own coordinator/foreman will ensure that the plan is evaluated (prior to the start of work) on behalf of the Commissioning Party (for example by the Commissioning Party's safety expert).

c. ATEX

Procedure 10030 applies to the safe execution of work that could pose an explosion hazard in zoned areas.

For work that can cause an explosion hazard (hot work class I/II), where it is not possible to use explosion-proof equipment, a risk assessment must be carried out in accordance with form 11090 and pursuant to the conditions set out in this assessment.

h. Performance.

The Contractor's project manager shall train his/her people on the specific dangers of the factory. In particular, personnel shall be familiar with the risks posed by vinyl chloride (CAS number 75-01-4), 1,2-dichloroethane (CAS number 107-06-2), ethylene (CAS number 74-85-1), chlorine (CAS number 7782-50-5) and hydrochloric acid (CAS number 7647-01-0).

In addition, safety data sheets for internal use have been drawn up for the chlorinated by-products '[light ends](#)', '[heavy ends](#)' and '[tars](#)' from the VC plant in Botlek. In the case of specific activities, personnel shall also be familiar with the risks posed by these substances.

For the PVC plant in Pernis, the above applies only to vinyl chloride (CAS number 75-01-4).

Training shall also cover the main parts of the company emergency plan (such as alarm systems and assembly points).

i. Every project manager of a Contractor shall receive an introduction from the Principal. This introduction covers all processes that are important for properly performing the activities at the Principal's locations.

The project manager or the Shin-Etsu contract manager coordinates this process.

8 Tidiness and cleanliness

- a. Every employee of a Contractor shall keep his/her workplace tidy before, during and after work.
- b. Every employee of a Contractor may only bring auxiliary materials and/or work supplies onto the factory site if he/she has received written authorization (such as a work order or work authorization) for this from the Principal.
- c. Where auxiliary materials and/or work supplies are used, unencumbered access must be ensured for auxiliary services and for the operation of installations by production personnel.

9 Preparation

- b. A Contractor must have access to sufficient and correct information in order to be able to perform the work safely and properly. The work order must contain sufficient information. If the information is not sufficient to allow the drawing up of a sound work plan, the Contractor must contact the Commissioning Party.
- c. Any complex, unusual and/or risky activities must be discussed in advance. For high-risk work and for operational high-risk activities for which no standard TRA (S-TRA) is available, the minimum requirement is a so-called Work Plan with Task Risk Analysis (TRA). The Work Plan must be drawn up by the Contractor and the accompanying TRA is drawn up jointly by the Commissioning Party, the party issuing the work permit and the Contractor, the party applying for the work permit (see part 10, Implementation). The work, the related risks and the management measures to be taken to ensure acceptable risks must be described clearly and unequivocally. The TRA must be assessed by a safety expert of the Commissioning Party and the Contractor(s).

If required by the scale (number of people involved), the complexity of the work and/or the exposure of employees to specific risks (see annex 2 to Directive 92/57/EEC dated 24 June 1992), an HSE plan is also required. This applies for example to:

- Projects in which the implementation phase amounts to more than 500 man days;
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- Work involving ionising radiation requiring designated controlled or supervised areas.

The HSE plan must be drawn up in consultation with an expert working group. The working group must include at least the following representatives:

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The Contractor's own coordinator/foreman will ensure that the plan is evaluated (prior to the start of work) on behalf of the Commissioning Party (for example by the Commissioning Party's safety expert).

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10 Performance

a. Work shall not be carried out without valid work permits or presence registration. Shin-Etsu adopts the basic procedure 03401 Work authorization and, within this, recognizes three risk levels of work:

- Presence registration (e.g. recording of work in the factory)
- High-risk work authorization required ('hot work', entry to enclosed spaces, high-pressure spraying work, work on equipment that may release harmful substances, etc.)
- Normal-risk work authorization required (if no high-risk authorization is required).

The risk level of the work is determined always and solely by Shin-Etsu's authorization provider. It is the Contractor's job to ask the Production Department for work authorization beforehand. At Botlek this must take place at least two working days beforehand, and at Pernis the authorizations for the following week should be requested before 15:00 on Thursday morning. The Contractor shall clearly describe the work to be performed, the material and hardware to be used and the number of people to be deployed.

Work authorization is valid only for the scope of the work set out on the authorization.

The 48-hour requirement lapses for emergency work; such work shall be coordinated jointly with the Shin-Etsu manager.

- b. The work authorization (or a copy) shall be present at the workplace and, as soon as the job is ready to be carried out, the authorization is to be issued direct to the Shift leader.
- c. Prior to the work, every employee of a Contractor shall conduct a LMRA at the workplace to establish whether all risks have been brought under control.
- d. To prevent the risk of falling tools (for example from stairs, platforms and hooped or caged ladders), it is mandatory to carry all tools in bags.
An alternative method is permitted if a bag is not the best option, but this must always be decided in consultation with the permit authority / shift leader. Workers are not permitted to depart from this rule on their own initiative.

11 Personal protective equipment (PPE)

- a. The Contractor shall provide personnel with suitable and sound PPE. Where, in the Principal's opinion, special protective equipment or facilities for certain activities are required, these shall be made available by or on behalf of the Principal.
At Botlek, queries concerning PPE may be put to the Authorization Coordinator/day shift.
At Pernis, queries concerning PPE may be put to shift 6 (day shift).
- b. The Principal makes the following standard PPE compulsory, and these items shall be supplied by the Contractor himself:
 - Safety helmet (NEN EN 397);
 - Faceshield
 - Safety spectacles with side shields (EN 166);
 - Hearing protectors (NEN EN 352-3);
 - High-top safety boots with heel (NEN EN ISO 20345, at least S3)
 - Overalls (fire-retardant, antistatic, chemical-resistant, type 6, EN 531, EN 1149-5, EN 13034).
 - Emergency escape mask (only for the Botlek plant).
- c. The following PPE is to be additionally provided by the Contractor himself. If these items of PPE are used, the following requirements apply:
 - Work jackets: fire-retardant, antistatic, chemical-resistant (NEN EN 531, NEN EN 1149-5, NEN-EN 13034).
Winter jackets must be waterproof (EN 343).
- d. All other PPE to be used shall conform to the applicable EN standards.
- e. PPE requiring inspection shall be maintained in accordance with the applicable inspection protocol.
- f. The nature of the work determines the PPE arrangements; this is stated on the work authorization.
- g. If the use of special safety equipment or personal protective equipment is laid down by the Principal or if the nature of the work so requires, the Contractor is obliged to use this in accordance with the relevant instructions.
- h. Facial hair is prohibited for workers who are required to wear protective respiratory equipment, or if the nature of the work necessitates such equipment. In practice, this means that workers must shave within eight hours prior to starting their shift.

12 Accidents and incidents

- a. In accordance with the Commissioning Party's procedures, the staff of the Contractor are required to immediately report all occurrences (accidents, near accidents, dangerous and/or undesirable situations and incidents relating to safety, health and the environment) to the Commissioning Party, which occur during or in connection with the implementation of the contract. Within this context, the Contractor is required to participate in all investigations conducted by the Commissioning Party. Shin-Etsu operates procedure 10401 Processing of incidents. Specifically, this means that at operational level, all occurrences are reported immediately to the Shin-Etsu Shift leader on duty.
- b. The Contractor must take measures to prevent (the recurrence of) dangerous and/or hazardous situations.
- c. Accidents and incidents must also be adequately investigated and recorded by the Contractor so that trend analysis and follow-up investigation are possible. The 1st report must have been received by Shin-Etsu within the specified time limit in accordance with the 'Incident reporting and investigation form'. This requirement also applies to the definitive report. See Appendix 12 for the form.
- d. Any damage to soil and equipment must be immediately reported to the Commissioning Party. The Contractor may be held liable for any damage.

13 Biological monitoring

- a. In some cases, personnel are monitored for exposure to hazardous substances. At the Principal's request, the Contractor shall encourage his personnel to take part voluntarily in biological monitoring. For very specific work situations, the Principal may stipulate a medical examination, with which the (sub)Contractor must comply. The Principal gives the Contractor feedback on the results.

14 Language requirement

- a. The working language at the Principal's sites is Dutch. The holder of the authorization and the issuer of the authorization must speak Dutch. Prior to the work, it must be ensured that both parties can communicate with each other. The issuer shall not issue any authorization if there are any language problems.
- b. To work independently, a co-worker must at least be able independently to understand the content of the authorization and must be able to understand and carry out instructions from the Principal.

15 Working hours

- a. The Contractor and Principal shall at all times abide by the Working Hours Act ([arbeidstijdenwet](#)).
- b. Working hours are laid down in consultation with the Principal and are in conformity with the Working Hours Act.

16 Materials and hardware

- a. The materials supplied/to be supplied by the Contractor shall be registered with a complete inventory on arrival on site, and be deregistered on departure.
- b. The Contractor's vehicles may, on leaving the site, be checked for materials not belonging to the Contractor and for which a pass has not been issued.

- c. All materials and hardware belonging to the Contractor shall, during the performance of the work, demonstrably be maintained/have been maintained by the Contractor in accordance with the standards in effect.
- d. Diesel motors shall be fitted with a spark catcher unless these motors conform to the [Euro 4 ,5 or 6](#) emission standard.
- e. The erection of the hardware shall be agreed with the Principal. It is not permitted to drive into a zoned area without the Principal's consent.
- f. The Contractor's personnel shall be able to operate the equipment correctly and shall, if required, demonstrably be in possession of the correct certificates.

17 Ground work

- d. It is not permitted to carry out operations on/in the ground without a valid work order; high-risk work authorization is in principle required for ground work (see also point b A Contractor must have access to sufficient and correct information in order to be able to perform the work safely and properly. The work order must contain sufficient information. If the information is not sufficient to allow the drawing up of a sound work plan, the Contractor must contact the Commissioning Party.
- e. Any complex, unusual and/or risky activities must be discussed in advance. For high-risk work and for operational high-risk activities for which no standard TRA (S-TRA) is available, the minimum requirement is a so-called Work Plan with Task Risk Analysis (TRA). The Work Plan must be drawn up by the Contractor and the accompanying TRA is drawn up jointly by the Commissioning Party, the party issuing the work permit and the Contractor, the party applying for the work permit (see part 10, Implementation). The work, the related risks and the management measures to be taken to ensure acceptable risks must be described clearly and unequivocally. The TRA must be assessed by a safety expert of the Commissioning Party and the Contractor(s).

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- e. ATEX

Procedure 10030 applies to the safe execution of work that could pose an explosion hazard in zoned areas.

For work that can cause an explosion hazard (hot work class I/II), where it is not possible to use

explosion-proof equipment, a risk assessment must be carried out in accordance with form 11090 and pursuant to the conditions set out in this assessment.

- a. Performance).
- b. If work must be carried out in the ground, it shall be investigated beforehand in cooperation with the Principal what notifications are needed and what preventative measures must be taken.
- c. Work in contaminated soil should be executed according to the CROW 400
- d. Groundwork companies must submit [KLIC notification](#) (WION).

18 Residues and waste

- a. The Principal is the owner of any residues and/or waste arising during the performance of the work.
- b. The Contractor shall collect the residues and/or waste in accordance with procedures in effect and offer them to the Principal.

19 Temporary accommodation

- a. Temporary accommodation may only be installed if the Principal has granted written consent.
- b. The Principal must specify in writing the period of time during which the accommodation may be installed.
- c. The Principal shall inform the Contractor in writing of the precise location and conditions of installation.
- d. Before temporary accommodation is taken into service, the Principal shall conduct a user inspection. The inspection must be recorded in writing. The Contractor is responsible for ensuring that the temporary accommodation conforms to all applicable standards and legal requirements.

20 Access to the company site

- a. Contractor personnel shall, at both the Botlek and Pernis locations, be in possession of a valid Shin-Etsu access pass. At Pernis, the pass is issued by Shell, and at Botlek by the business park porter.
- b. Day passes are not Shin-Etsu passes and must be surrendered to the porter at the end of the day.
- c. At Botlek, an access pass must be requested at least 24 working hours beforehand. A copy of the proof of identity is to be attached to the request. When collecting the pass, the co-worker shall be able to prove his or her identity.
At Pernis, a pass shall be requested from Shell Pass Administration. Preferred Vendors may request the pass themselves; in other cases, this is to be done by the Shin-Etsu management assistant.

21 Alcohol, drugs, medication and smoking policy, mobile telephones

- a. The presence and consumption of alcohol and drugs on the company site is prohibited.
- b. If the use of medication adversely affects ability to react or other physical or mental capabilities, the Contractor must notify his or her company doctor of this in good time. The company doctor advises the employee on scope and restrictions in respect of the usability of his or her own work or adapted work, in relation to the use of this medication. The Contractor shall follow the advice.
- c. Smoking is allowed only in the places indicated.
- d. Mobile telephones are prohibited unless the QHSE Department issues written authorization for this. In that event, the telephone must be an ATEX-approved device.

22 Undesirable behaviour

- a. Shin-Etsu adopts a procedure concerning undesirable behaviour; this procedure also applies to the Contractor.

23 Penalty policy

- a. Shin-Etsu adopts a penalty policy which, should the occasion arise, also applies to the Contractor.

24 Changes from the previous version

Par./Section 9 Textual changes in respect of the Commissioning Party versus Contractor

Paragraph 10 Lanyards added

Par. 11 Type of safety boot altered

Par. 12 Altered incident investigation method added

Par. 21 Smart watches added

25 References

<https://www.deltalinqs.nl/stream/vmp-14-iwp-1-dl-aanbevelingen-veilig-werken-voor-opdrachtgevers-en-opdrachtnemers-2009definitieve-versie.pdf>

This document 08310 is also used as appendix 6 to the HSE plan Botlek design phase.