

Annex A

Burgan Oil Health, Safety
and Environment (HSE)
Policy



HSE Framework
Guideline for project HSE plans

Burgan Cape Terminals Project HSE Plan

Contractor 1 HSE Plan

Contractor 2 HSE Plan

Project owner	
Project	
Project number	
Document number	
Review	
Date	
Author	

Authorization Document

Approval

Contractor/Employer	Name	Function	Initials

Preface

This document forms the general generic part of the Project Health, Safety and Environment Plan (hereafter referred to as the HSE plan) and should be used as such during the constitution of the overall HSE plan (including contractor HSE plans). The general part has been drawn up and approved by THE COMPANY.

Table of Contents		page
1	Introduction	6
2	HSE policy and targets	7
3	Work description	8
4	Design phase	12
4.1	HSE aspects during the design phase	12
6	Risk Inventory and Evaluation (RI&E) during the performance phase	18
7	Coordination HSE consultation and communication structure	19
8	Training, instructions and information	22
9	Supervision	24
10	Reporting of (near) accidents, unsafe situations and operations	26
11	Rules and regulations + Sanctions	28
12	Dangerous substances, waste disposal and pollution	31
13	Fire fighting and emergency facilities	32
14	HSE project reporting	33

ANNEXES 34

1. Table of Contents from the specific part of the HSE plan
 2. Declaration of Conformance
 3. Project Security Organization Outline
 4. Risk Inventory:
 - 1) Construction phase
 - 2) General safety and health risks concerning surroundings and site
 - 3) Construction site layout
 5. Report Form for prior notification if applicable
 6. Safety Observation Round Form
 7. Sanction Policy - disciplinary measures
 8. Job hazard analysis (JFA) + JFA form
 9. HSE Project template
-

1 Introduction

This guideline for developing a Project Safety, Health, Welfare and Environment Plan (HSE plan) describes the manner in which the primacy of HSE aspects is organized for the particular project in conformance with the requirements set out by Burgan Cape Terminals bv and the local legal requirements. For further information about the project, reference is made to the part of this plan that relates specifically to contractors.

The purpose of the HSE plan is:

- to make the HSE targets known to all those who are involved in this project;
- to reveal the safety element of the project's organizational structure;
- to effect the appointment of officials in this structure;
- to give a description of the specific project safety risks and of the measures that must be taken against them;
- to give a description of the HSE regulations and procedures that must be complied with in respect of the performance of work, information, supervision, communication and reporting.

It is only allowed to deviate from this general HSE plan with written approval from the Project Manager.

This plan is a dynamic plan that will be modified on the grounds of additional information and new insights from sources such as inspection findings and incident evaluations.

All contractors who are involved must signify their conformance with the HSE plan in writing. To do this they must sign a declaration in the form set out in annex 2.

The mandatory HSE plans that are required to be drawn up for all contractors and their subcontractors for their part of the work must be annexed to the specific part of this HSE plan. The HSE plans must comprise the following components at the least:

- a description of the work in question;
 - the project organization, including the names of key personnel;
 - a management policy declaration;
 - a work plan;
 - the results of the risk inventory conducted for the work, the HSE measures to be taken and the name of the employee with responsibility for their implementation;
 - the general safety coordination of the work in question.
-

2 HSE policy and targets

The following targets have been set for this project:

- no lost time injuries
- the prevention of incidents and unnecessary risks
- prevention through coordination and cooperation
- no environmental incidents
- the prevention of complaints.

The above targets will be achieved as follows:

- health, safety and environment (HSE) care is directed towards the recognition and prevention of unsafe situations and operations, and towards the actual reduction of all risks.
 - during the preparatory phase, all those involved will devote the maximum amount of attention possible to the work areas (the welding location, the size of the parts that have to be lifted in, the application of safe assembly methods etc.). In addition to this, if it can be seen that standard work/ manufacture/assembly methods are not possible and/or circumstances exist which may lead to their not being possible, a specific 'Job hazard analysis' will be made and any additional measures which arise out of this analysis will be implemented. At the same time the various activities will be planned in such a way that they do not form any threat together.
 - a Kick-off meeting will be held prior to the performance of each part of the work during which the HSE aspects will be examined with all the parties involved.
 - the client, Project Management, Contractors and subcontractors will take care of information, supervision, checks and optimal conditions continuously throughout performance.
 - the environmental impact from emissions, drainage and neighbourhood nuisance must be avoided as much as possible. An inventory of potential causes will be made and evaluated, and if necessary control measures will be implemented.
 - Every employee is himself/herself responsible for HSE as well as for orderliness and neatness in the workplace.
 - Project Management is responsible for the implementation of the safety policy in order to achieve the targets above. HSE is given extremely high priority.
 - Risky work will, if necessary, be suspended.
 - A general HSE coordinator is appointed for the supervision and coordination of all contractors' Safety coordinators.
-

3 Work description

Permits

All the work that is to be performed on the premises is subject to the permit system of THE COMPANY.

Activities are divided into two categories:

- Hot work
- Cold work

Work is performed according to the safe work permit Work Directive.

If an ignition source can be formed as a result of the activities or if there is any risk of explosion or fire developing in any other manner then a *hot work permit* is necessary.

The following work is classed as hot work: welding, burning, sharpening, sawing, chopping, sandblasting, as is work with equipment that is not explosion-proof like electrical turbines, illumination, demolition hammers, soldering irons and mechanical excavation work.

In all other cases a *cold work permit* is required.

Planning

Planning is essential for safety. In the event that work involving multiple disciplines or multiple contractors is to be performed then each contractor is required to observe the planning. This will be discussed on a weekly basis during the construction meetings.

3.1. Names and addresses of involved parties

3.1.1 Owner/Employer + Telephone list access gates + Emergencies

Name:	
Address:	
Postcode/Place	
Contact person: GSM	
Telephone	
Fax	
Name:	
Address:	
Postcode/Place	
Contact person:	
Telephone	
Fax	

Name:	
Address:	
Postcode/Place	
Contact person:	
Telephone	
Fax	

In case of accidents and/or damage

Name:	
Address:	
Postcode/Place	
Contact person:	
Telephone	
Alarm number	

3.1.2. Project engineer

Name:	
Address:	
Postcode/Place	
Contact person: GSM	
Telephone	
Fax	

If required, according to the provisions of *local labour legislation* and/or required by Burgan Cape Terminals bv, the following person is appointed to coordinate safety and health (HSE coordination) during the design phase:

Name:	
Firm:	
Address:	
Postcode/Place	
Contact person GSM Telephone	
Fax	

3.1.4 HSE coordinator execution phase

In accordance with the Burgan Cape Terminals bv requirements and if applicable, provisions of *local labour legislation*, THE COMPANY will be responsible for the coordination of safety and health during the performance phase.

Name:	
Address:	
Postcode/Place:	
Contact person:	
GSM:	
Telephone:	
Fax:	

Name:	
Address:	
Postcode/Place:	
Contact person:	
GSM:	
Telephone:	
Fax:	

3.1.5 Performing parties

The performing party is responsible for informing, discussing and confirming his subcontractors as regards this general HSE plan.

Information that relates to subcontractors must be included in the contractor's specific HSE part of the plan. The status of the contractor's HSE plan must be signed by the contractor and approved by THE COMPANY at the start of the work. In the event that unexpected observations/criticisms are present in the HSE plan that has been submitted, then only that work which is covered properly by the HSE plan may be performed and a work permit will be granted for that specific work only.

Every change made to the HSE plan must be submitted to the HSE coordinator in writing in advance.

The contractors are:

Name of Firm	Address	Zip code/City	Contact person	Telephone

4 Design phase

4.1 HSE aspects during the design phase

Explicit thought must be given to HSE aspects during the design phase. The purpose of this is to avoid and limit risks, adverse occupational safety and health circumstances, and environmental impact as far as possible during the realization, the useful life as well as the demolition phase of the object that is to be built.

Examples of such specific studies include:

HSE aspect	
Process safety	Safety during the normal conduct of business, start-up, shut-down and maintenance
Safety of installations	In Europe CE marking (PED, Machine directive, EMC directive)
Ergonomics	Safe and “user friendly” operation
Sustainable construction	Restrictions on the consumption of raw materials, fuels and energy
Environment	Restrictions on environmental impact during the conduct of business and demolition
Construction safety	Safety and health of all contractors during construction

In accordance with local legal requirements and/or best practice, the results of the safety studies that relate to the operational phase of the installations must be incorporated in the HSE document.

This HSE plan is primarily directed towards the execution phase during which the principles regarding health and safety welfare as described in the local labour legislation are paramount.

If applicable, local labour legislation can make appointment of a HSE coordinator for the design phase and drawing up a HSE plan for this design phase mandatory. The client has then delegated responsibility for this to:

.....

The main task of the HSE coordinator within the design phase is to make an inventory of and, as far as possible, to reduce the risks that are present in the design. The project designers must be expressly instructed to use aspects of safety and health as the underlying premise for their design. The risk inventory and evaluation made of the design will reveal if additional measures are necessary. (ref Dutch Labour Legislation)

4.2 Risk inventory and evaluation (RI&E) design phase

Risk inventory and evaluation are made during the project's design phase. The manner in which potential risks are to be eliminated or reduced is determined during the risk inventory and evaluation process. In principle two alternatives available for this:

1. Eliminating risks by changing the (design of the) construction;
2. Reducing risks by implementing measures during performance.

In principle alternative 1 is the best alternative but is, for practical reasons, not always attainable. In that case alternative 2 is the designated way of reducing risks.

The risk inventory and evaluation is directed towards the constructive performance of the project while paying specific attention to safety aspects.

The Risk Inventory & Evaluation evaluates the project on the following subjects (non extensive list):

- Safe and responsible choice of materials;
- Surrounding factors;
- Measurement and weight of parts;
- Accessibility of installation parts such as appendages, pipelines and cableways;
- Work methods (workplace, prefabrication, fieldwork etc);
- Support facilities;
- Responsible use of power supplies;
- Maintenance;
- Site layout, escape routes.

The evaluation will be conducted by a team comprising people who are involved in the project such as

- Project Manager;
- Construction Officer;
- Operating Officer;
- HSE coordinator design phase.

At least one of the people nominated must be trained in conducting risk inventory and evaluation at the design phase.

The HSE will incorporate the results of this analysis in the design phase part of the plan. The authoritative measures that arise out of the risk evaluation will also be recorded there.

The Project Manager is responsible for supervising the follow-up of the agreements that have arisen out of this evaluation.

5 HSE aspects during the execution phase

5.1 Safety organization

All contractors who are to be used must be in possession of a locally accepted HSE certificate or the equivalent thereof (after consultation and approval by THE COMPANY). As a result of this a significant number of performance procedures and work regulations have already been satisfied, responsibilities have been assigned and authorities granted. For this reason it is clear to each individual party what the expected manner of working is, what tasks each one has in respect of HSE for the work concerned, as well as who can be addressed when any divergence from these is identified. In broad terms the overall safety organization of this project looks like this: (see annex 3)

In the majority of projects a contractor will work with subcontractors.

The actual safety organization is described in the specific part of the plan. Names of the people concerned are also given there.

Employees of THE COMPANY present on the work site are subject to HSE supervision by the Construction Officer.

5.2 Responsibilities and tasks

Project Manager

The project manager is responsible for ensuring that the project progresses safely. While doing this his most important tasks are:

- ensuring that the general HSE plan is drawn up in good time and that the project is performed in accordance with the plan;
- ensuring that a risk inventory and evaluation is conducted during the design phase and that the recommendations made are followed up;
- ensuring that effective HSE reporting takes place and that if necessary action points are set and their follow-up monitored;

Construction Officer

The Construction Officer is responsible for the safe execution of construction work in accordance with the safety procedures, measures and work permits.

The Construction Officer has the following tasks in the field of safety:

- organizing a Kick-off safety meeting before the various work starts;
 - holding regular discussions with the general HSE coordinator and ensuring that the specific contractor HSE coordinator performs his work as he should;
 - giving commentary and advice on the general HSE plan and the supplementary parts of the plan that relate to subcontractors;
 - evaluating any (near) incidents, and unsafe situations and operations, and reporting on them;
-

- conducting daily on-site inspections and taking immediate action when any unsafe situation exists;
- asking the HSE coordinator about toolbox meetings;
- seeing to it that all employees and visitors are aware of the rules that apply on site;
- discussing the HSE plan on a weekly basis during the construction meetings;
- inquiring after outstanding action points;
- where hazardous tasks or situations are involved, suspension of construction related activities as and when necessary.

The Construction Officer reports to the Project Manager.

5.1.1 HSE coordinator execution phase

The HSE coordinator is responsible for the organization and maintenance of an effective and workable system of safety management for the project. The interrelated tasks for this include inter alia:

- drawing up and updating the HSE plan in consultation with the Management Team and the contractors' HSE coordinator;
- lending support to the observance of the HSE plan during the construction period;
- evaluating and advising on additions to the HSE plan that have been drawn up by the various contractors;
- arranging domestic matters;
- drawing up of inspection schedules;
- reporting to the Management Team on the project's safety performance;
- performing inspections of the construction site and organizing HSE audits;
- formulating improvement proposals that are based on safety rounds, inspections, audit findings and reports of (near)accidents;
- work permit procedure;
- site instructions;
- entry procedure;
- keeping the HSE dossier up-to-date;
- giving solicited and unsolicited advice on HSE matters to the Project Manager;
- staying in line with the local HSEQ dept if applicable;
- participating actively in toolbox meetings;
- drawing up Job Hazard Analysis and lifting plans

The HSE coordinator reports to the Project Manager.

5.1.2 Contractors' HSE coordinator

The tasks can be summarized as follows:

- drawing up and updating the specific part of the HSE plan in consultation with the HSE coordinator and the Construction Officer;
- adding HSE information to the HSE dossier;
- ensuring that all reports of (near) incidents and unsafe situations are investigated and dealt with properly;
- participating actively in toolbox meetings;
- where risky work or situations are involved, suspending work as and when necessary in consultation with the HSE coordinator and the Construction Manager;
- ensuring that inspections are conducted according to the planning and monitoring the follow-up of any action points that arise out of the inspection;
- supervising the observance of agreements as described in the performance phase of the HSE plan and, if necessary, taking corrective measures ;

Every contractor must appoint his/her own HSE employee, who must at the very least be present and available during the performance of the work in accordance with the table below. The safety expert level of the Contractor's HSE coordinator must be acceptable for the Project owner or employer. The contractor's HSE employee must have the authority and responsibility to implement corrective steps, and his advice must be followed.

In the petrochemical industry it is standard practice for a contractor to provide safety expert support. The availability of a HSE employee depends on the number of employees to be committed to the project (see table below).

Employees present	Contractor's HSE coordinator present
< 10	2 days per week
< 20	3 days per week
< 35	4 days per week
> 35	permanently

Additional requirements can be predominant on a local level.

The contractor's HSE coordinator reports to the Construction Officer and THE COMPANY HSE coordinator.

The HSE dossier comprises the following contents:

- the most recent version of the contractors' HSE plan (including additions made by subcontractors about open points/actions re the HSE plan);
 - the most recent version of the project organization (including subcontractors);
 - the most recent version of the layout of the land;
 - copies of locally accepted HSE certificates if applicable (for subcontractors as well);
 - conformance documents for the HSE plan from all contractors (annex 2);
 - work permit procedures;
 - entry control procedure;
 - an overview (planning) of toolbox meetings that have been and have yet to be held (subject, firm, those present and the data);
 - an overview of safety rounds that have been and have yet to be made with notes of the most important findings, trends, actions and their status;
 - most recent list of the alarm numbers;
 - overview of first-responder per contractor;
 - names of employees who have received safety training and have signed for this, per contractor;
 - copies of all the (near) incident reports and the follow-up actions resulting from them;
 - overview/status of HSE actions as discussed with the Construction Manager and/or arising out of various project discussions about the agenda item 'safety';
 - a copy of the notification of the work submitted to the competent Authorities if applicable;
 - safety performance reports in conformity with annex 6;
 - specific JHA's that have been drawn up;
 - induction film + test;
 - the number of hours worked per week (to be submitted by the HSE coordinator on a weekly basis).
-

6 Risk Inventory and Evaluation (RI&E) during the performance phase

Risk Inventory and Evaluation (RI&E) during the performance phase looks like this:

- General Risk Inventory and Evaluation at the execution phase conducted by the client (see annex 4)
- RI&Es included in the HSE plans as drawn up by all the (sub)contractors involved;
- Specific Job Risk Analyses (JFAs).

Job Risk Analyses

Performance/assembly work by contractors and/or subcontractors is performed in accordance with 'standard' production/assembly methods and 'standard' JFAs.

In the event that the circumstances or the situation on the spot is such that these production/assembly methods cannot be applied in the standard fashion, then *specific* JFAs must be drawn up by the contractor, the Construction Officer and the HSE coordinator together. In accordance with the procedure from

In the case of specific JFAs relating to work on an internal company installation, allowance must be made for the fact that communications with the operational staff must be conducted in the local language.

The necessity to draw up specific JFAs will be recognized during the RI&E design phase as well as during the work preparations made by the (sub)contractors. The circumstances of a particular situation can also give rise ad hoc to the drawing up of a specific JFA.

JFAs are made available by contractors in good time and must be annexed to the documentation submitted when applying for a permit to perform the work in question.

7 Coordination HSE consultation and communication structure

The number of meetings to be organized is related to the size of the building project. The organization of the following meetings and their periodicity should be read as a guideline.

7.1 Project meetings

HSE is the first item on the agenda at the biweekly project meetings. Discussion of this agenda item will include the following matters (responsibility of the Project Manager):

- status and follow-up of risk inventory and evaluation;
- accidents/other extraordinary events in the period just passed;
- status of follow-up of action points from previous discussions;
- remarks made during HSE inspection rounds in the period just passed*;
- HSE aspects for the coming period;
- use of shared facilities (scaffolding, power supplies, lifting materials.);
- tool boxes
- any other questions about HSE aspects.
- any other relevant business

Internal meetings

HSE is the first item on the agenda at the weekly internal meeting. Discussion of this agenda item will include:

- accidents/extraordinary events in the period just passed;
- status of follow-up of action points
- remarks made during HSE inspection rounds

Safety consultations

HSE stand paramount during the biweekly safety consultations, which are attended by all the safety experts who are involved in the project above through the contractors and THE COMPANY. The following safety-related matters will be discussed during these consultations;

- coordination of interaction work to be performed by the various contractors;
- general rules, including PPE;
- parking problems/ transport / access roads / loading and unloading;
- planning the work and the risks/dangers that arise out of it;
- reporting of unsafe situations/operations
- status of follow-up of action points

Construction Meetings

To ensure that all work related to the project proceeds safely, stays within its planning and budget, and remains coordinated, the Construction Officer will organize the following meetings throughout the duration of project's performance;

- Construction meetings (held with various contractors on a weekly basis);
- Kick-off meetings (held prior to the project's start);
- Toolbox meeting(s), held as often as necessary but no less than biweekly;
- Morning consultations, if necessary;
- Coordination meetings with all the contractors (weekly). Work to be performed by the various contractors will be attuned at these meetings. During the discussions each contractor will indicate what work he plans to perform in the course of the following week. Any possible interference that might be caused by the work and a responsible solution for this are examined during the discussions. Contractors who are performing work that has not been notified can be suspended.
- Safety meetings with all the safety experts from THE COMPANY project team and contractors/ subcontractors (at least twice a month).

7.2.1 Kick-off meetings

A Kick-off meeting will be held by the Construction Officer and THE COMPANY HSE coordinator for the Contractor in question and his HSE coordinator prior to the start of the project.

Further explanation of the following matters will be given during the Kick-off meeting:

- HSE procedures;
- plan of approach, performance procedures;
- shared facilities (scaffolding, hoists, power supplies, sanitation, housekeeping etc.);
- project risks and specific JFAs .

The contractor concerned will pass on relevant information from the Kick-off meeting to his employees during a special Toolbox Meeting, which is to be held prior to the start of work.

7.2.2 Toolbox meeting

It is mandatory to hold a toolbox meeting:

- for the performance of any work to which a specific JFA applies (directed at those people who are going to perform the work);
- at least once every two weeks, about current HSE themes which arise out of the work that is to be performed, or from the findings that have been made during the HSE inspection rounds;
- when called by the Project Manager as a result, for example, of irregularities that have been identified;
- prior to the start of the work, all parties must hold a special Toolbox Meeting for all their employees who are involved.

Items that need to be raised during these meetings include:

- relevant information from the Kick-off meeting;
 - PPE
 - orderliness and neatness;
 - general house rules
 - work permit procedure, JFAs and lifting plans
 - the marking and delineating of dangerous (work)spots;
 - emergency procedures (alarms, escape routes, assembly points, first aid, fire extinguishers, etc)
 - reporting of incidents and unsafe situations (**contractors must adopt a proactive attitude**)
 - lifting and assessing loads
 - working at heights
 - how to handle (electrical) tools
 - how to deal with waste (separate collection)
-

7.1 Reports

All agreements made during these meetings as well as any actions that have to be taken must be noted in writing. The name of the person responsible for any action must also be noted in writing. The reports are kept in the HSE file.

Project Progress Meetings held during the construction phase will discuss safety in the light of the HSE weekly report and the inspection rounds. Agreements made about the corrective and preventive measures that are to be taken are recorded in the HSE weekly report.

7.2 Management consultation HSE

The project's HSE performance is discussed on a monthly basis during the Project Management Team consultation. The HSE coordinator and the contractor's HSE coordinators will also meet together once a month in order to align HSE aspects.

8 Training, instructions and information

The following training, instructions and information apply:

- in principle all contractors are HSE certified or the equivalent thereof (after consultation and approval by THE COMPANY) so that all those involved have received the appropriate training
- prior to the start of work all contractors and subcontractors' employees must have received a briefing from the contractor's safety expert about the HSE rules that apply to the construction site and the construction site rules. During this briefing explanation is given of the construction project, along with an explanation of the risks that arise from this project and of the risks that are associated with working at a petrochemical plant.

Various safety subjects come up for discussion here, like:

- 1) Safety policy. *Starting work in the morning in good health, work safely and return home as you came*
 - 2) What do we want to achieve and how can we achieve it?
 - 3) The prevention of incidents.
 - 4) The reporting of unsafe situations/operations.
 - 4) The use of safe tools.
 - 5) What to do in the case of an Alarm or an incident.
 - 6) Assembly points.
 - 7) Housekeeping.
 - 8) Fire extinguishers and fire prevention.
 - 9) The use of personal protective equipment (PPE).
 - 10) The lifting/moving of slinging loads
 - 11) Working at heights. Ladders/ scaffolding /step ladders
 - 12) Cables and pipes
 - 13) Safe lifting
 - 14) Miscellaneous
- At the same time everyone must sign a form (the employee's introduction to the construction site). Visitors must be accompanied when on the construction site. When entering the construction site for the first time, people must acquaint themselves with the general construction instruction and sign their acknowledgement of it;
 - Those who have applied for, or already hold work permits must have received a work permit briefing;
 - Holders of work permits and personnel who are directly involved in 'hot work' must have received a briefing on how to use small extinguishers;
 - People will be informed about site-specific risks and the local work procedures during the Kick-off meeting as well as during the consultation held prior to the start of work;
 - In the case of work that requires a specific JFA, a special toolbox meeting will be held during which the employees involved will be informed of the risks associated with the job and the measures that have been implemented.
-

- The operators of:
 - Hydraulic excavators;
 - Hoisting machines;
 - Forklift trucks;
 - Combined excavation/loading machines;

must be in possession of applicable certificates regarding Material Handling.

The operators of tower cranes with a hoisting capacity > 10 ton must be in possession of the appropriate professional certificates as well as a health certificate and a copy of their work history. In the case of foreign operators, the employee must contact the competent Authorities how to proceed. These people may possibly still have to sit a practical exam in the crane on the construction site as well.

N.B. All operators must still comply with other legal requirements.

- The safe lifting/moving of slinging loads must be done by an experienced and qualified person, a so-called rigger, evidenced by a Riggers Certificate or as THE COMPANY judges fit.

THE COMPANY'S Construction Officer can impose additional training requirements.

9 Supervision

Contractors.

Those holding work permits directly oversee the safe performance of work in accordance with the work permit, as well as the safety requirements that are indicated in it.

In addition to this, execution is overseen on a daily basis by a person nominated by the party who has applied for the work permit. At the same time the contractors/subcontractors' performing party, the safety expert and the project leader will also oversee the work, and the tools and equipment that are to be used.

Note: All contractors must supervise their subcontractors and at the same time are responsible for the safety aspects that relate to them.

THE COMPANY.

Supervision of work by THE COMPANY rests on the following aspects:

1. Supervision of procedural content, job requirements, agreements, and legal rules and regulations.
2. Supervision of and adherence to the above.

Ad 1. To perform the job the contractor must, in addition to consulting the Health & Safety plans, also verify the current procedures that apply to the execution of that job within THE COMPANY. Should any lack of clarity or even deficiencies become apparent, then the contractor in question must make the necessary changes, and the personnel responsible for execution and THE COMPANY must be informed of any such changes before any work can be started at all.

Ad 2. During the course of the work THE COMPANY will check if the work is being performed in accordance with the established procedures. This will be done by means of a visual inspection at the site. At the same time toolbox meetings, work discussions and instructions etc. relating to new personnel will be checked/observed.

9.1 Safety observation rounds

Every contractor must conduct a safety observation round at least once a week, which is to be reported in writing by:

- The contractor's HSE coordinator (see annex)

The contractor's HSE coordinator draws up a plan for this.

Independently safety observation rounds will be conducted by THE COMPANY Project Team as well as members of THE COMPANY Management Team and the contractors.

9.2 Sanction policy (Safety is a shared responsibility)

Contractors/subcontractors and their personnel (as well as visitors and suppliers of products) who work on THE COMPANY land, must observe the applicable laws and regulations as well as THE COMPANY's own regulations and agreements at all times.

Contractors/subcontractors and their personnel, and others who are present on THE COMPANY land who, for any reason whatsoever, cannot or do not wish to observe the safety rules and regulations that apply to THE COMPANY can, through their actions, place themselves and others in danger.

Every person who fails to observe the safety regulations, the legal rules and regulations, this plan or any other applicable rules, and as a result of this places himself or others in danger, shall be held fully responsible for his conduct.

In the event that reprehensible behaviour can be identified, depending upon the nature and the gravity of the deviation, it might be decided to warn the people involved or to deny their participation in the project WITH IMMEDIATE EFFECT. In the event that the deviation is the result of unclear or erroneous instructions, remedial action will be taken immediately.

This policy is in line with the theme 'Safety is a shared responsibility' with its underlying assumptions that:

- agreements are useful and should be observed: if not, adapt consistently;
- supervision of their observance in line with policy;
- the consequences of any breach are clear;
- apply sanctions consistently.

See annex: Sanction Policy – Disciplinary Measures

10 Reporting of (near) accidents, unsafe situations and operations

When an incident/emergency occurs, it must be reported to the *control room or another identified central point* immediately.

Tel: Internal:
External:

Central point personnel will alert necessary emergency services.

Unsafe situations/near misses must be reported to the contractor's HSE coordinator/safety expert immediately, who in turn informs THE COMPANY (HSEQ).

Accidents with or without default and incidents in the HSE field must be reported to the Construction Officer immediately. This means:

- FAT An accident leading to death within one year after its occurrence
- LTI Lost time injury is a any work related injury on the project site that causes a person to be absent from work for at least one shift because he/she is unable to perform any duties (not including the shift where the injury occurred). Also include third party/visitor LTI's. In case of doubt, contact Burgan Cape Terminals HSE holding
- RWC Restricted Work Case is any injury as a direct or indirect result of work related activity leading to a person being unable to perform any part of their normal duties, not including the day or shift when the incident occurred. The employee is working but cannot fulfil his regular function.
- MTC Medical Treatment Case is any injury which requires medically treatment by medically trained persons (Doctor, nurse or paramedic)
- FAC First Aid Case is any injury, which receives attention from a person trained in first aid.
- EDC Environmental damage case is direct or indirect damage caused to the water environment, flora and fauna, as well as direct or indirect contamination of the soil which could lead to a serious risk to human health
- MDC Material Damage Case is a functional impairment of the surface, features, facilities or structures; resulting in a loss > 25K

N.B.: TRC Total Recordable Cases $TRC = FAT + LTI + RWC + MTC + EDC + MDC$

Soil pollution, waste discharges and emissions (EDC) also belong to the category of incidents within the HSE field.

After any of the abovementioned incidents has occurred, an accident investigation and report must be made. THE COMPANY management will put an investigation team together.

In the following cases THE COMPANY must submit a report to the competent Authorities and the Project Owner/Employer immediately:

- a fatal accident;
- admission to hospital instead of first aid;
- damage determined according to THE COMPANY procedure....

In addition to this, the concerned contractor must fill in an accident report form. A copy of this report will be filed in the HSE dossier.

Monthly HSE reports of non-operating sites will be sent to the Burgan Cape Terminals Financial Controller

Projects using the HSE Project template. In case of extension projects at an operating terminal the reports will be send to the Financial Controller Projects, if a separate project organisation is set up. In all other cases HSE reporting will be part of the reporting procedure using the HSE 2008 template.

11 Rules and regulations + Sanctions

11.1 Entry to the land

THE COMPANY land will be accessible to contractors' employees and for the transport of materials/material for the contractors through *a indicated gateway only*.

Entry to the land requires the following:

- possession of an entry pass if required;
- possession of a Personal Safety Logbook from which it can be seen that if applicable:
- the required training has been completed
- being equipped with satisfactory PPE see subsection: 11.3;
- identification (passport/identity card)
- signature of the rules of conduct that currently apply on site;
- familiarity with emergency instructions.

11.2 Entry pass

One week before the employee starts, the contractor's HSE coordinator will submit a completed application form to THE COMPANY *HSE coordinator*.

11.3 Visitors

Visitors must always report to the main entrance.

11.4 Traffic

A general speed limit of *x* km/h applies to motor vehicles on the roads inside the gateway.

Employees' cars must be parked in the car park outside the gateway

The transport of large components must be reported beforehand to the Construction Officer or the HSE coordinator by the contractor concerned. The Construction Officer or the HSE coordinator decides whether a transport plan must be drawn up.

These plans must be submitted as an annex to the work permit application.

11.5 Personal Protective Equipment (PPE)

Standard approved personal protective equipment must be provided by the contractors themselves and must include at least safety shoes, a hard hat, and safety glasses or goggles with side protection (with prescription glass if necessary or adjustable lenses).

Work clothing must have long-sleeves and long trousers must be worn. Sleeves and trouser legs may not be rolled up. Risks arising from the installation/work may necessitate specific personal protective equipment requirements (gloves, hearing protection or protection against falls). This will be indicated in the work permit.

11.6 Orderliness and neatness

The tidying up and cleaning of the work place is a continuous job for everyone and forms part of their normal duties. The (sub)contractor is responsible for orderliness and neatness during work.

A clean site is a safe site

Points for attention in this area include:

- the mandatory hanging up of hoses, cables and the like with the help of S-hooks so that the risk of tripping over is eliminated;
- tidying up material as quickly as possible (any waste produced, packing, superfluous consumer material);
- separate waste collection, as far as is reasonable;
- empty sorted waste collection into the proper refuse containers;
- do not store any material along escape routes/passages, between scaffolding or around safety facilities (fire extinguishers, alarm bells etc.) or near the edge of stairs etc.;
- the place where the storage/ temporary stationing of material is to be stored/stationed must always be arranged jointly with the Construction Officer;
- floors and work spots must be tidied up once the daily job has been completed, but must also be kept in an orderly state during the work itself;
- during work at heights (platforms/stairs), all small tools and small materials must be placed in containers/buckets;
- all parts that come free (bolts, nuts, insulation etc.) must be tidied away immediately, for example in plastic bags or buckets and stored on the spot.

After the work has been completed and the scaffolding has been taken down, the (sub)contractor must deliver up the work places in a clean state.

11.7 Contractor park

The plan for the contractor park must have the approval of THE COMPANY land manager.

The contractor containers

- may not be placed under pipe bridges/cable trays etc.;
- must be given safe access by means of gangways;
- must be connected in accordance with local requirements for 'temporary construction site facilities';
- must meet Health and Safety requirements regarding layout and sanitary facilities;
- no radios are allowed outside the container park on a terminal in operation;
- GSM use (not allowed on an operating terminal);
- alcohol and drugs are forbidden;
- must comply with the local fire department regulations;
- smoking is only allowed in the huts/areas designated for this purpose.

11.8 Work permits

The general work permit procedure applies to work that is to be carried out on sites where there is no new construction.

The application for a work permit must be made timely, this means that:

- the work permit must be applied for and discussed with the HSE coordinator no later than 5 days prior to the start of the work. Necessary job hazard analyses must be annexed to the work permit in question;
 - the permit is only valid for the work described.
-

New construction sites :

-

Can be subject to a risk free zone. In that case it can be decided to grant an overall permit for these locations.

In the event that specific activities take place on THE COMPANY land, this will no longer be the case and Company safety procedures will apply fe:

- *At each work location several people at least must be in possession of a certificate for the use of small extinguishers.*
- *A permanent fire watch will be laid on for work in proposed routes and pump plateaus per work place.*

11.09 Fencing off/erecting barriers

For excavation work up to a maximum of 1 metre, a red/white warning tape or cordon must be erected. In the case of deeper pit excavations, a solid barrier must be erected.

A substantial barrier must also be erected around manholes in the tank pits.

Areas that have been fenced off /surrounded with a barrier may not be entered just like that. Areas fenced off with red/white tape may only be entered in order to perform the work that is described in the work permit.

Highly dangerous areas are indicated by signs and are cordoned off with yellow/black checked tape. In view of the heightened danger (X-ray work), these areas may only be entered by the service that has erected the barrier.

11.10 X-ray work

All X-ray work must be reported to the Construction Officer or the HSE coordinator before 12.00 pm. During office hours it is not allowed to perform X-ray work in the immediate vicinity of the project management accomodation. Exception to this rule can only be made after written permission has been given by the Construction Officer or the HSE coordinator.

11.12 Working at heights (>2.0m)

During adverse weather conditions (wind force 6 and above, thunderstorms) it is not allowed to perform work at heights; this includes insulation work,.

In case of extensive lifting jobs a lifting plan must be submitted to the Construction Officer or the HSE coordinator for approval beforehand. Scaffolding may only be erected by a recognized contractor, and after clearance may only be used by means of a green card (scaffold tag).

It is strictly forbidden for other contractors' employees to change any scaffolding.

All scaffolding will be checked 1 x every 15 days by the scaffolding firm.

All scaffolding must be earthed and resistance should be measured..

12 Dangerous substances, waste disposal and pollution

12.1 Dangerous goods

No dangerous goods shall be present on the building site.

Should this be necessary then it must be authorized by the Construction Officer.

12.2 Waste (separated removal)

The environmental parks are to be used for the collection and removal of waste during the project and refuse containers for the various types of waste are located there.

Define who is responsible of waste removal and registering of removed substances

12.3 Contaminated soil and/or groundwater

In order to assess the ecological effects, a soil -investigation has been conducted at the site. Any measures that may possibly have to be taken as well as the storage requirements and/or removal is set out in the specific part of this plan. In the event that soil pollution is not found until execution is underway, then an investigation will still have be conducted. On the basis of this investigation it will be determined what measures must be implemented to enable the work to proceed further. If necessary contaminated soil/groundwater will be removed by truck.

13 Fire fighting and emergency facilities

13.1 Fire fighting facilities

Contractor park.

Sufficient numbers of fire extinguishers with a filled weight of at least 5kg must be available in each contractor container and according to the containers' lodgings layout; people themselves are responsible making sure that the prescribed fire extinguishers are present. A flame-proof waste container must be placed in every hut area where smoking is allowed.

Each contractor must submit a layout of the accommodation that he is using which indicates the location of the fire extinguishers, the first aid kit and the escape route.

Smoking is only allowed in the areas that have been designated for that purpose.

Smoking is not allowed anywhere else on the contractor park or on the construction site.

The contractor must ensure that sufficient numbers of fire extinguishers are available at the work locations on the site. At least 3 per work area.

At the same time, all welders who are working for the contractor should have undergone practical fire fighting training/drill.

13.2 Emergency preparedness

Adequate, up-to-date and project-specific emergency information will be hung up at the start of the work.

In the case of serious accidents and fire, the rules set out in THE COMPANY ' Company Emergency Plan' will apply. All employees must be informed about this emergency plan especially regarding:

- alarm raising; **Report accident by telephone**
- the acoustic alarm;
- escape routes;
- assembly points.

A possible evacuation will be led by the HSE Coordinator or a Industrial First Responder.

Escape routes are indicated at each location by the use of stickers/signs, which feature a white arrow on a green background. Where necessary the escape routes are fitted out with emergency lighting.

Escape routes must always remain freely accessible during the organization of the work place, the setting up of equipment, the storage of material, the erecting of scaffolding etc.

In places where this is not possible, or if these facilities have to be 'blocked', then alternative provisions must be made after consultation with the HSE coordinator. Possible implementation of any such provisions can be found in the specific part of the HSE plan.

13.3 First aid and other (medical) facilities

Every contractor must have at least one first aid kit at his disposal.

The entrance gate serves as the central first aid post.

Contractors must ensure that one Industrial First Responder per 25 employees, with the possible addition of first aid, is present on the Construction Site **at all times**.

14 HSE project reporting

The contractor's HSE coordinator is responsible for preparing a weekly HSE report regarding the tasks executed on the construction site.

- at least 1 x per week per location
 - increased activities result in increment of safety observation rounds per week
-

ANNEXES

1. Table of Contents for the specific part of the HSE plan
 2. Declaration of Conformance
 3. Project Safety Organization Outline
 4. Risk Inventory
 5. Report form for prior notification, if required
 6. Safety performance Observation Form
 7. THE COMPANY Sanction Policy
 8. Job hazard analysis (JFA) + JFA Form
 9. HSE Project template
-

Annex 2

Declaration of conformance by contractor

Declaration

The signatory of this declaration:

Mr / Mrs :
From contractor :
Job
Address :
Place of :
residence
Telephone no. :

declares

- that his/her company has received a copy of the Burgan Cape Terminals project HSE plan (HSE plan) datedrevised.....
- that his/her company has also submitted the specific part of the H&S plan for the project dated., revised.....
- that he/she shall work in conformance with these HSE plans.
- that the working conditions of employees working under his authority and those of the subcontractors that he/she has contracted shall be considered equally important as other primary matters such as money, time and quality.

The following person is appointed on behalf of the company as the safety contact person for this project:

Mr / Mrs :
Job
Telephone no: :
Gsm :

Signature :

Place and date :

Signature

Prior to the start of work this declaration will be sent to:
THE COMPANY for the attention of Mr

Annex 3
Project Safety Organization Outline

Annex 4
General Risk Inventory

Annex 5

Report Form for prior notification of the project to the competent Authorities if applicable

Example Dutch form

NOTIFICATION OF THE PROPOSED ERECTION OF A CONSTRUCTION WORK

(as meant by Section 2.26.1 of the Occupational Safety and Health Decree)¹

1. Description of the construction work

1.1 The (construction) work comprises the building / construction / execution of:

.....
.....

1.2 Address / location of the construction site:

.....
.....

Telephone:..... Fax:.....

2. Names and addresses of the parties involved

2.1 Client (s)
Name :
Address :
Postcode / Place :
Contact person :
Telephone : Fax:

2.3 Performing party (ies)
Name :
Address :
Postcode / Place :
Contact person :
Telephone : Fax:

2.4 Coordinator (s) Design phase
Name :
Address :
Postcode / Place :
Contact person :
Telephone : Fax:

2.2 Project Designer (s)
Name :
Address :
Postcode / Place :
Contact person :
Telephone : Fax:

2.5 Coordinator (s) Performance phase
Name :
Address :
Postcode / Place :
Contact person :
Telephone : Fax:

3. Planning and execution information

3.1 Planned starting date for the construction work.....

3.2 Planned construction period:.....

3.3 Expected maximum number of employees that will be present on the construction site at any one time:.....

3.4 Planned number of employees and self-employed people on the construction site.....

3.5 Names of businesses already chosen:

.....
.....
.....

4. Date of notification:

5. Signature client

Annex 6
Observation Form for Safety Performance

Annex 7
Sanction Policy

Annex 8
Job hazard analysis (JFA) + Form

Annex 9 HSE project reporting

"Actuals 20XX - Project XXXXXXXXXXXXXXXXXXXX HSE

Location:

XXX

Date of last update:

DD-MM-YYYY

Person responsible for coordination:

HSE Coordinator

HOW TO COMPLETE THIS SPREADSHEET

This spreadsheet supports the Monthly Project Highlights Report for each project with figures. By having identical formats, the figures from the different locations can be aggregated to a complete picture for the Vitol Terminals Group.

- 1) Yellow cells are for input - others are not.
- 2) Please do not change the formats, as this will make compiling the complete picture very difficult.

Please distribute this completed HSE spreadsheet each month with the Monthly Project Highlights Report as follows:

SSW@vitol.com (Sim Seowwah)

MBL@vitol.com (Margit Blok)

"Actuals 20XX - Project XXXXXXXXXXXXXXXXXX HSE

ACTUAL 2008	Number of Fatalities	Lost Time Injuries excl. Fatalities	Number of Medical Treatment Cases	Number of Restricted Work Cases	Number of First Aid Cases	Number of MDC	Number of EDC	Number of Near Incidents/ Misses	Number SOR	Total number of Injury Cases	Total Reportable Cases project
	FAT	LTI	MTC	RWC	FAC	MDC	SL	NIR		TIC	TRC
January	0	0	0	0	0	0	0	0	0	0	0
February	0	0	0	0	0	0	0	0	0	0	0
March	0	0	0	0	0	0	0	0	0	0	0
April	0	0	0	0	0	0	0	0	0	0	0
May	0	0	0	0	0	0	0	0	0	0	0
June	0	0	0	0	0	0	0	0	0	0	0
July	0	0	0	0	0	0	0	0	0	0	0
August	0	0	0	0	0	0	0	0	0	0	0
September	0	0	0	0	0	0	0	0	0	0	0
October	0	0	0	0	0	0	0	0	0	0	0
November	0	0	0	0	0	0	0	0	0	0	0
December	0	0	0	0	0	0	0	0	0	0	0
Subtotal YTD	0	0	0	0	0	0	0	0	0	0	0

Lost Time Injuries (pls provide description for each LTI):

- 1)
- 2)
- 3)

Third Party LTI's:

- 1)
- 2)
- 3)

Other :

- 1)
- 2)
- 3)
- 4)
- etc.

Burgan Cape Terminals HSE Reporting Definitions

Category	Description	Abbreviation	Definition	Input or Calc	Frequency
1 - HSE	Number of Fatalities	FAT	An accident leading to death within one year after its occurrence.	INP	M
1 - HSE	Number of Lost Time Injuries (excl. FAT)	LTI	Any work related injury on the project site that causes a person to be absent from work for at least one shift because he/she is unable to perform any duties (not including the shift where the injury occurred). Also include third party/visitor LTI's. In case of doubt, contact Vitol Terminals HSE Focalpoint. Each incident shall be reported to Vitol Terminals Management.	INP	M
1 - HSE	Medical Treatment Case	MTC	Any injury which requires treatment by medically trained persons (Doctor, nurse or paramedic).	INP	M
1 - HSE	Number of Restricted Work Cases	RWC	Any injury as a direct or indirect result of work related activity leading to a person being unable to perform any part of their normal job duties, not including the day or shift when the incident occurred. The employee is working but cannot fulfil his regular function.	INP	M
1 - HSE	Number of First Aid Cases	FAC	Any injury which receives attention from a person trained in first aid.	INP	M
1 - HSE	Material Damage Case	MDC	Functional impairment of the surface, features, facilities or structures; resulting in a loss >25K	INP	M
1 - HSE	Environmental Damage Case	EDC	Environmental damage is direct or indirect damage caused to the water environment, flora and fauna, as well as direct or indirect contamination of the soil which could lead to a serious risk to human health	INP	M
1 - HSE	Number of Near Misses/ Near Incidents	NIR	An observed unsafe act or condition, or an opportunity to improve environmental, health and safety practice based on a condition, situation or an incident with potential for more serious consequences.	INP	M
1 - HSE	Safety Observation Round	SOR	Safety Observation round is an inspection during which the site is toured and observations are made of every item bearing focussing on HSE aspects. The tour is performed by the projectmanager or his delegate and a contractor's representative. A subcontractor can join the team as well.	INP	M
1 - HSE	Contamination	none	Any incident which means that stored product cannot be used as intended, or is reduced in value, or where any asset is filled with the incorrect product.	Terminology	none
1 - HSE	Incident	none	A sudden unintended work-related event which has caused injury to any person, interruption of work, damage, spillage or contamination.	Terminology	none
1 - HSE	Injury	none	Injuries are harm to a person directly or indirectly as a result of events in the work environment. Injury includes worsening of a pre-existing medical condition of a previous injury.	Terminology	none
1 - HSE	Third Party	none	A person who is visiting the project site/terminal but not employed by or contracted by Vitol (ship's crew, tanker drivers, visitors etc).	Terminology	none
1 - HSE	Total number of Injury Cases	TIC	The sum of (FAT+LTI+MTC+RWC)	CALC	M
1 - HSE	Total Reportable Cases project	TRC _{project}	The sum of (FAT+LTI+MTC+ RWC+MDC+EDC)	CALC	M