

Administration Requirements: HSE Management

Rev.	Change no.	Date	Reviewed by	Approved by	Status
01	500000417500	2017-06-15	FLATINO	SKARPMK	Released Version

Effective date: June 19, 2017

Document owner: HSES Processes Manager

Table of Contents

Section	Title	Page
1	Introduction	3
2	Reference documents	3
3	Definitions	4
4	Health, Safety and Environment	5
4.1	HSE Management System	5
4.2	Specific HSE Requirements	7
4.3	Monthly HSE Reporting	9
5	Appendices	10
5.1	Appendix 1: Global HSE and Security Policy	10
5.2	Appendix 2: HSE 12 Golden Rules	11

1 Introduction

It is **TechnipFMC**'s intention that, in the implementation and administration of the **PO/Agreement**, **Supplier** shall utilize its own methods and procedures. However, to achieve the proper level of quality and safety for the **Work**, **TechnipFMC** has specified certain mandatory requirements as detailed in these Administration Requirements.

If a specific requirement, stated in this document, by nature, is not relevant for the **Work** performed by **Supplier**, **Supplier** is exempt from adherence to such requirement without further acceptance from **TechnipFMC**.

2 Reference documents

Doc. number	Title
ISO 14001	Environmental management system - requirements with guidance for use
OHSAS 18001	Occupational health and safety management system requirements
NORSOK S-002	Working environment
NORSOK S-003	Environmental care
NORSOK S-006	HSE evaluation of Suppliers (ST097)
NORSOK S-012	HSE in construction-related activities

3 Definitions

Refer to PRD-0000030203, Global Purchasing Terms for Goods and Services, for definitions used in this document.

Exceptions within this document, the terminology:

- ▶ **FMCTI**, referring to legacy FMC Technologies entities, is hereafter named **TechnipFMC**.
- ▶ **Subcontractor**, means subcontractor at any level.

Specific for this document:

Terminology	Definition
Shall	An absolute requirement which to ensure conformity with the standard
Should	A recommendation. Alternative solutions with the same functionality and quality can be accepted.
May	A procedure which is permissible within the framework of the standard permission or a proposal indicating an opportunity for the user of the standard.
Accident	An event which has caused injury, illness and/or damage to/loss of assets, or harm to the environment or to a third party.
Near miss	An event which, under slightly different circumstances, could have caused injury, illness and/or damage to/loss of assets, or harm to the environment or a third party.
Work-related	An event or exposure in the work environment caused or contributed to the condition (injury or illness) or significantly aggravated a pre-existing condition. Work-relatedness is presumed for injuries and illnesses resulting from events or exposures occurring in the workplace, unless an exception as listed below specifically applies.
Work Environment	Establishments and other locations where one or more employees are working or are present as a condition of employment.
Occupational Injury	Any work-related wound or damage to the body resulting from an event in the work environment. Examples include cut, puncture, lacerations, abrasion, fracture, bruise, contusion, chipped tooth, amputation, insect bite, electrocution, or a thermal, chemical, electrical or radiation burn. Sprain and strain injuries to muscles, joints, and connective tissues are classified as injuries when they result from a slip, trip, fall or other similar accidents.
Falling or potential falling	HSE incidents with potential severity level red and yellow where energy is released (accidents + near misses).
First Aid Treatment	Treatment that is limited to visits to a doctor or health care professional solely for observation or counselling; diagnostic procedures, including administering prescription medications that are used solely for diagnostic purposes; and any procedure that can be labelled as first aid.
Medical Treatment	Treatment, other than first aid, and includes managing and caring for a patient for the purpose of combating disease and disorder.
Recordable Cases	An injury or illnesses that is work related and is a new case and results in the following: death, days away from work, restricted work or transfer to another job, medical treatment beyond first aid, or loss of consciousness, or a significant injury or illness diagnosed by a physician or other licensed health care professional, even if it does not result in the above.
Restricted Case	A recordable injury or illness where an employer or health care professional keeps, or recommends keeping, an employee from doing routine functions of his or her job or from working a full workday that the employee would have been scheduled to work before the injury or illness occurred.
Lost Time Injury	A recordable injury or illness where an employer or health care professional keeps, or recommends keeping, an employer off work.
Lost Time Injury Incidence Rate	The total of Lost Time Injuries multiplied by 200,000 hours and divided by actual hours of exposure.
Total Recordable Incidence Rate	The total number of Recordable Cases multiplied by 200,000 hours and divided by the actual hours of exposure.

4 Health, Safety and Environment

4.1 HSE Management System

Supplier shall plan and carry out his activities in a way that the **Work** is performed without loss of life, injury, damage to equipment or facilities, without any environmental damage due to spills or unforeseen discharges, and without unforeseen disruptions to production or processes.

Supplier shall have an implemented and documented HSE Management System covering both Health & Safety and Environmental considerations. Relevant part of the HSE management system shall be compliant with OHSAS 18001, ISO 14001 or other recognized international standards like OGP, API, or similar.

For deliveries to the Norwegian Continental Shelf, compliance to NORSOK S-002, S-003, S-006 and S-012 is mandatory. **Supplier** must also comply with **TechnipFMC's** and/or **Company's** requirements for supervision and monitoring.

- ▶ All hazards to the health, safety of personnel and the environment have been identified, assessed and eliminated where possible or are being controlled through formal planning methods and procedures.
- ▶ All personnel are given required training and are competent to perform their tasks safely.
- ▶ All information concerning HSE incident records/statistics are sent to **TechnipFMC** upon request.
- ▶ Environmental accounting for all the hazardous chemicals is shared with **TechnipFMC** upon request.
- ▶ **TechnipFMC** specific HSE requirement are implemented as requested.

Supplier shall in addition to the foregoing define specific Security Management measures within its scope and the applicable hazards of the location. No activity shall start unless covered by approved written procedures, plans or other relevant documentation.

Continues, next page.

Supplier shall comply with all applicable national governing laws and provisions related to HSE, and their system shall as a minimum include the following elements:

Element	Requirement
Leadership and commitment	Responsibility for HSE shall lie with the line management. Top executives shall be personally involved in HSE management. The commitment to HSE shall be evident at all levels within Supplier's organization, and the corporate culture shall ensure HSE focus in all that Supplier does.
Policy, strategic objectives and programs	<p>Supplier shall have a documented corporate HSE policy. Supplier shall document the name, title and experience of the most senior manager in the organization responsible for ensuring that this policy is obeyed. Supplier shall also document who has the overall and ultimate responsibility for HSE matters within its organization.</p> <p>Supplier shall define and document which methods are applied for informing personnel about its HSE policy, and which routines are executed to inform personnel of any changes to this policy.</p> <p>Supplier shall establish an HSE program which covers the elements of the HSE Management System. This program shall form an integral part of the overall HSE program for the respective site, project or activity, and cover specific activities with a description of what is to be delivered. The HSE program shall be preventive and must be kept updated throughout the work.</p> <p>The HSE program shall cover occupational health and the working environment, safety, the environment and emergency response.</p> <p>For deliveries to the Norwegian Continental Shelf, the HSE program should be developed in accordance with NORSOK S-012.</p> <p>If specifically requested, a HSE program for the PO/Agreement shall be submitted for review to TechnipFMC.</p>
Organization, resources and documentation	<p>Supplier's management shall be involved in HSE activities, and in setting and following up HSE objectives.</p> <p>Supplier's organization shall facilitate effective HSE management and communication, with particular emphasis on HSE as an integrated element in planning and implementing operations. Relevant arrangements shall be in place to ensure that meetings are held with HSE as a priority item on the agenda.</p>
Evaluation and risk management	Supplier shall employ suitable and generally recognised methods for identifying, assessing, checking and handling hazards and their consequences. These methods shall be documented.
Planning and procedures	Working practices and procedures shall be consistent with Supplier's HSE policy and HSE Management System.
Implementation and monitoring	Supplier shall supervise and monitor its' own HSE performance. Results of this supervision and monitoring shall be passed on without undue delay to Supplier's management and personnel. Frequent management inspections shall be performed to verify compliance with prevailing standards.
Auditing and reviewing	<p>Supplier shall operate a documented HSE auditing program. The audit process/procedure shall be documented.</p> <p>Planned HSE reviews shall be carried out by members of Supplier's senior management, or by appropriate personnel appointed by senior management.</p>

4.2 Specific HSE Requirements

TechnipFMC's work regulations, HSE Policy and HSE 12 Golden Rules

- ▶ **Supplier's** personnel shall comply with applicable **TechnipFMC's** work regulations and safety rules at all times. All employees shall take part in safety drills and other exercises while on site.
- ▶ **Supplier's** HSE policy for the **Work** shall be fully compliant with the **TechnipFMC's** HSE Policy, as specified in Appendix 1.
- ▶ **Supplier** shall evaluate **TechnipFMC's** HSE 12 Golden Rules and comply where it is applicable in their work operations. The rules provide an understanding of 12 high risk activities and give better understanding and awareness of the steps needed to avoid serious incidents, as specified in Appendix 2.

HSE training

If required by **TechnipFMC**, **Supplier** shall attend **TechnipFMC** HSE training.

Assessment of Subcontractors' Suitability

Supplier shall assess the HSE expertise and record of its **Subcontractors**, and validate compliance to national governing laws and provisions related to HSE.

Working Environment and Occupational Health

- ▶ **Supplier** shall have a system which ensures a good overview of the working environment at sites where its personnel are employed. The overview shall be in accordance with the relevant official requirements and performance indicators. Monitored performance indicators shall make the largest possible contribution to prevention of the health problems related to the working environment.
- ▶ **Supplier** shall have a system which ensure and document:
 - The identification and monitoring of all physical, chemical, ergonomic and psychosocial/organizational factors which could be potentially detrimental to health and performance. This system shall be linked to continuous systematic monitoring of the exposure of **Supplier's** and **Subcontractor's** employees to these factors, and to a program for reducing potential exposure which could be harmful to health.
 - Systematic health monitoring as specified by applicable regulations and good professional practice, identification, evaluation and reporting of work related illnesses and corrective measures, follow-up of employees on sick leave, and prevention and treatment of alcohol and drug abuse.
 - That all chemicals due to be used during the work are evaluated for their health risk during transport, use and disposal, and that chemicals with the smallest health risk are given preference wherever this is technically and operationally feasible.

Psychosocial Emergency Service

Supplier shall have a documented organization to provide care for its own personnel and psychosocial support for personnel and their immediate families in the event of serious incidents.

Safety Data Sheet

Supplier shall have a system in place ensuring that correct information is available on the health risk or fire, explosion and environmental hazards posed by chemical products used in the **Work**. Safety Data Sheets shall be kept up to date and conform to GHS requirements.

Personal Protective Equipment (PPE)

Supplier shall be able to demonstrate that the personal protective equipment used during the **Work** provides satisfactory protection in the relevant tasks.

Environmental Management

- ▶ **Supplier** shall have a system to ensure and document the following:
 - Evaluation and follow-up of the **Work**'s environmental impact.
 - Identification of environmental aspects of activities and services,
 - Implementation of operational control
 - Monitoring control measures to ensure that the environmental impact is kept as low as possible.
 - Selection of environmentally optimal solutions.
 - Inclusion of the environmental aspect in management documentation, including operational procedures
 - Evaluation of measures to reduce discharges/emissions to soil, water and air.
- ▶ **Supplier** shall systematically and regularly evaluate, monitor and document chemical usage to ensure minimal discharges and optimal operation, when use of potentially environmentally harmful chemicals.
- ▶ **Supplier** shall establish and maintain a register of chemicals used for execution of the **Work**. The register shall be available to **TechnipFMC** and **Company** for review.

Notification and Reporting of Incidents and Lost Time Injuries (LTI)

- ▶ **Supplier** shall comply with all official requirements for notifying and reporting events/hazardous conditions relating to safety, occupational health and the environment. Routines for ensuring such compliance shall be documented.
- ▶ All undesirable events/hazardous conditions experienced by **Supplier** shall be reported to **TechnipFMC** without undue delay, whether the event occurred at **Supplier**'s premises, at any site or at other locations. The report shall include the date of the event, its causes and any preventive follow-up measures taken.
- ▶ Every fatality and lost-time injury suffered by **Supplier**'s personnel, and any near miss incidents with a high loss potential, shall be notified to **TechnipFMC** within 24 hours of the incident. A full investigation report including direct and underlying causes shall be specified and submitted to **TechnipFMC**.
- ▶ Other undesirable events shall be reported in the monthly report. **Supplier** shall have a system for registering and following up incidents (non-conformances).
- ▶ Note that special conditions may apply to reporting lines, types of incidents and timeframes for reporting (Company requirements)

Prohibition Notices and Demands for Improvement

Any prohibition notices and demands for improvement imposed on **Supplier** by government authorities shall be reported to **TechnipFMC** without undue delay. Should a complaint be filed under HSE legislation against **Supplier** while performing the **Work**, this must also be reported to **TechnipFMC** without undue delay.

4.3 Monthly HSE Reporting

When required by **PO/Agreement**, **Supplier** shall provide a monthly HSE report. The report shall cover the status of monthly HSE activities as specified in table below, in an agreed format.

TechnipFMC shall be informed of **Supplier's** definition of a lost-time injury and work related illness, and its definition of and practice concerning the use of alternative work. Hours worked shall be specified by (i) the total number of hours worked on the Agreement in the period and (ii) the total number of hours worked by **Supplier** in total (**Supplier** figures).

A report shall be provided in case of any recordable incidents related to the **Work**.

Sample as follows:

	Supplier's total		<Project A>		<Project B>	
	Current month	YTD	Current month	YTD	Current month	YTD
Reactive indicators						
1 Number of worked man-hours						
2 Average manpower (average number of employees)						
3 Number of near misses						
4 Number of fatalities						
5 Number of LTI (Lost Time Injuries)						
6 Number of days from LTI						
7 Number of RWC (Restricted Work Injury Cases)						
8 Number of MTC (Medical Treatment Cases)						
9 Number of first aid cases						
10 Number of material damage over USD 10,000						
11 Number of RTA (Road Traffic Accidents)						
12 Number of SVA (Severe Vehicle Accidents)						
13 Number of lifting related incidents						
14 Number of falling objects						
15 Number of environmental incidents						
16 Waste management; % waste segregation						
17 Number of spills greater than one (1) barrel of oil or chemicals						
18 LTIF (Lost Time Injury Frequency)*						
19 TRIR (Total Reportable Injury Rate)*						
20 Number of hours overtime						
21 Sick leave %						
22 Number of reported thefts						
23 Number of criminal damages						
24 Number of violence and threats						
25 Number of robberies						
26 Number of security incidents						
Proactive indicators						
27 Number of HSE inductions						
28 Number of safety observations						
29 Number of JSA (Job Safety Analysis)						
30 Number of Toolbox talks						
31 Number of safety walkabouts						
32 Number of safety moments conducted						
33 Number of HSE training hours						
34 Number of HSE inspections						
35 Number of HSE management visits						
36 Number of HAZID meetings						
37 Number of HSE audits						
38 Number of emergency drills and exercises						
39 Number of HSE meetings						

* Frequencies are per 200.000 working hours

5 Appendices

5.1 Appendix 1: Global HSE and Security Policy

This policy defines TechnipFMC's absolute commitment to the Health, Safety, Environment and Security (HSES) of all those who can either directly or indirectly be affected by our business activities.

HSES will be managed as an integral part of our business, based on a genuine care and concern for the people and the environment. We will not compromise safety, health, security or environmental sustainability to achieve our financial, project, service and manufacturing objectives.

We are committed to fostering an incident-free environment worldwide through:

- > Our traditional belief that all injuries are preventable.
- > Creating a leadership climate that protects the health, safety and security of our employees, contractors, suppliers, clients, visitors and of all those engaged or affected by our activities.
- > Continuously eliminating or reducing risk of injury related to our activities through design, process improvement and technologies.
- > Operating in a manner that minimizes our impact on the environment and develop sustainable solutions to reduce carbon emissions and the overall environmental footprint.
- > Securing our people, assets, technology, sensitive information and reputation.
- > Complying with all legislative requirements, laws and regulations. When we deem necessary we will exceed those requirements to meet our internal values.
- > Providing resources and support to achieve continuous improvement.

HSES is everyone's responsibility. Every person has the right to stop the work if they consider conditions are unsafe, in any way.

Our success and continuous improvement will be measured through the reduction of incidents, risks, and environmental footprint through clear and meaningful performance indicators.

Compliance with this policy is the responsibility of all Management, employees and contracted personnel and enabled through visible commitment of management.



Doug Pferdehirt
Chief Executive Officer
January 2017

5.2 Appendix 2: HSE 12 Golden Rules

The purpose is to establish standard best practice procedures for the twelve highest risk activities. These golden rules will provide an understanding of these risk areas and a better understanding and awareness of the steps needed to avoid a serious incident. These rules will be incorporated into the site/business HSE procedures and behavioral observation process.

1. Mechanical Lifting Operations

Lifts utilizing cranes, hoists, or other mechanical lifting devices will not begin until:

- ▶ 'No Touch Policy' - Tag lines and/or Push/Pull sticks will be used to guide loads lifted by cranes, hoists, forklifts or other mechanical lifting equipment. Under no circumstances should a person guide or handle a suspended load with his/her hands.
- ▶ A Job Safety Analysis (JSA) has been completed and the weight of the load and the lifting method and equipment has been determined by a competent person.
- ▶ Lifting devices are rated appropriately for the load to be lifted.
- ▶ All lifting equipment and gear have been inspected for damages or defects before rigging.
- ▶ Only trained and authorized persons are allowed to rig a load or operate lifting equipment.
- ▶ All employees are clear from the load to be lifted. No person shall go underneath a suspended load.

2. Lift Truck Operations

Lift trucks are not to be operated unless:

- ▶ The truck has been inspected and confirmed to be in safe working order.
- ▶ Certified and authorized persons are operating the lift trucks.
- ▶ They are driven at a safe speed – no faster than brisk walking pace.

Lift trucks shall never be used:

- ▶ To lift or carry people.
- ▶ To carry a load heavier than the rated capacity
- ▶ With the forks raised
- ▶ While using a mobile phone or smoking.

3. Lifting, Carrying and Handling

Before physically handling any equipment, objects or chemicals the following precautions need to be taken:

Lifting and carrying objects

- ▶ Never lift an object over 23 kg (50 lbs.) without the aid of another employee or a mechanical lifting device. (Note: in some countries, there is a lower weight limit for females)
- ▶ Use the correct lifting techniques when lifting and carrying objects.
- ▶ Always inspect the routes over which an object will be moved to ensure that there are no obstructions or spills that could cause a slip or trip
- ▶ Never carry an object up or down stairs if you cannot see where you are stepping and/or cannot use one hand to hold the stair railing.
- ▶ Never lift an object that you cannot grip or control safely. Objects that cannot be gripped or controlled safely must be carried in a suitable container, lifted by a mechanical lifting device or by two employees.

Hand protection

- ▶ Gloves are required for lifting, carrying and handling parts, tools and equipment.
- ▶ The proper glove will be selected based on the potential risk of physical injury, chemical exposure or required task.
- ▶ Glove should not be worn when there is a risk of the glove being caught and pulled into rotating or moving equipment.

4. Working at Heights

Working at a height 1.8 meters (6 feet) above ground cannot proceed until:

- ▶ A fixed platform is used with guard or hand rails, or
- ▶ A fall arrest equipment is used that has:
 - A proper anchor, mounted preferably over-head
 - Full body harness using double latch self-locking snap hooks at each connection
 - Synthetic fiber lanyards with shock-absorber
- ▶ A visual inspection of the fall arrest equipment and system is completed and damaged equipment is taken out of service
- ▶ Person(s) is competent to perform the work at height and to use a fall arrest system.
- ▶ All tools and equipment are secured to prevent from dropping from height.
- ▶ The area below the work is cordoned off.

5. Working with High Pressure Equipment

Before any hydrostatic or gas pressure testing can be conducted:

- ▶ A JSA is completed, reviewed and signed by all persons and posted in the work area.
- ▶ All pressure test equipment must be inspected and confirmed to be in safe working order before use.
- ▶ Approved testing procedures must be available and made known to all involved.
- ▶ The safe stand-off distance, determined by ballistic calculations, must be barricaded with caution tape and/or flashing lights
- ▶ Only competent persons are allowed to conduct pressure testing or be within the barricaded test area while the system is under pressure as allowed by the procedure.
- ▶ Never adjust any fitting while system is under pressure. Testers must be behind protective shields during the pressure test.
- ▶ Any incident involving pressure testing is to be immediately followed by a work stoppage and a complete and thorough bleed-down of the system

6. Energy Isolation

Isolate hazardous energy sources prior to conducting work on any system. Hazardous energy sources may be mechanical, electrical, hydraulic, and other. Isolation of hazardous energy sources cannot proceed unless:

- ▶ All hazardous energy sources have been identified.
- ▶ The method of isolation and discharge of stored energy are executed by a competent person
- ▶ Stored energy has been confirmed to be discharged or released.
- ▶ A system of locks and warning tags are utilized at isolation points
- ▶ A test is conducted to ensure the isolation is effective before starting work on the equipment

7. Hot Work

Work involving the use of open flame or spark producing equipment for welding, cutting, brazing, pre-heating will not proceed until:

- ▶ The work area environment is inspected and a hot-work permit has been issued by a competent person
- ▶ The hot work permit is posted in the work area.
- ▶ The work area is cleaned and free of flammable materials and debris.
- ▶ Fire extinguishers are provided in the work area
- ▶ A fire watch is provided continuously during the work and for a period of 1 hour after the work is complete, and intermittently for an additional 3 hours.

8. Confined Space Entry

Entry into a confined space cannot proceed unless:

- ▶ All other options have been considered and ruled out.
- ▶ Testing of atmospheric conditions in the confined space had been conducted and evaluated and is repeated as required.
- ▶ A confined space entry permit has been issued and signed by an authorized person.
- ▶ The entry permit is posted in the work area.
- ▶ All persons involved are competent and fit to do the work.
- ▶ A stand-by person is stationed outside the confined space.
- ▶ Adequate ventilation is provided in the confined space.
- ▶ Emergency rescue equipment and procedure is available.

9. Environmental Conservation

In all areas of operations, the impact of the environment should be considered before beginning any activity:

- ▶ Waste coolant, oil, chemicals, etc. are properly collected and disposed of and not discharged into open drains, waterways or land.
- ▶ Metal scrap, wood waste, plastics, etc. are segregated and properly disposed of or recycled.
- ▶ All hazardous or harmful emissions into the atmosphere are contained, controlled and monitored.
- ▶ The use of energy is controlled, reduced and monitored.

10. Operating Motor Vehicles

All categories of vehicles must not be operated unless:

- ▶ Vehicle is fit for purpose, inspected and confirmed to be in safe working order.
- ▶ The number of passengers does not exceed the manufacturer's design specification for the vehicle.
- ▶ Loads are secure and do not exceed manufacturer's design specifications or legal limits for the vehicle.
- ▶ Seat belts are worn by all occupants.

Drivers must not operate the vehicle unless:

- ▶ They are trained, certified and medically fit to operate the class of vehicle
- ▶ They are familiar with the local traffic laws.
- ▶ They are not under the influence of alcohol, drugs and are not suffering from fatigue
- ▶ They do not use cell phones, including hands-free devices, and radios (2-way) while driving

11. Working in High Risk Countries

Before traveling to a high risk country always assess the risks and follow the crisis plan:

- ▶ Check for:
 - Travel advisories, restrictions and bans
 - Country risk assessments
 - City security reports
 - Health and disease reports
 - Contact information for your national embassy
- ▶ Carry an international emergency medical card.
- ▶ Make sure that vaccinations are current, especially when visiting developing countries
- ▶ Ensure that necessary requests are completed and signed by the appropriate authority if you are traveling to a country designated as high risk.
- ▶ List key contacts and phone numbers for the hotel, site to be visited, transportation, etc. Provide this list to you manager and establish a call-in protocol.
- ▶ Ensure that you will have a mobile phone that will work at your destination.

Upon arrival at the destination:

- ▶ Do not use transportation from unknown sources. If the pre-determined transportation is not there call the local contact.
- ▶ Use only hotels that have been identified as safe by your local contact.
- ▶ Do not go out at night alone.
- ▶ Report all suspicious activities to your contact and your security responsible.

12. Management of Change

Work arising from temporary and permanent changes to organization, personnel, systems, process, procedures, equipment, products materials or substances cannot proceed unless a Management of Change process is completed.

- ▶ All proposed changes must undergo an adequate HSE review to ensure that additional hazards that may potentially be introduced with such changes are identified, and control measures implemented before the changes are effected.
- ▶ The proposed changes and assessment should be reviewed and approved by Management.
- ▶ The changes must be communicated to all operating personnel.
- ▶ Upon completion, the changes should be audited against the approved plan to confirm that there is no HSE hazard.

The changes should be reviewed periodically to assess effectiveness and take corrective action if necessary.