

Global Technical Function Specifications

Project HSE Specification

APMT-GTF-SPC-01

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| | | | | | |

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1 Introduction

This specification describes the detailed health, safety and environmental requirements related to the supply of products and services to an APMT project Site.

The client organisation of APMT (Employer) is committed to being a leader in health, safety and environmental management. It promotes and integrates good HSE performance as a core element in planning, design and construction to achieve its aim of 'Safety for Life'. Please make reference to Appendix A for the APMT HSE Policy.

2 Purpose

This document is annexed to a contract or agreement, hereafter referred to as Contract.

Our vision is to prevent illness, injury, business losses and environmental harm on our premises, and at our projects.

We will engage with our employees, partners and suppliers so that everyone is enthusiastically involved in managing risk, acting as a champion for our realistic and practical vision across all countries and regions that we operate in.

APM Terminals' commitment to safety translates into:

- i. License to operate;
- ii. No hierarchy;
- iii. No compromise;
- iv. Not optional.

3 Scope

This specification is applicable for works executed on the project Site by any contracted parties such as contractors, sub-contractors, manufacturers, suppliers, etc., hereafter referred to as **Contractor**.

The specification applies to all projects contracted by APM Terminals, from the moment the Contractor is given access to Site.

4 Responsibilities

It is the responsibility of the Contractor to comply with all provisions of the Contract and this specification.

This document is owned by APMT Global Technical Function (GTF) - Asset Delivery.

5 Glossary

5.1 Definitions

| Term | Description |
|-------------------------|---|
| Contractor | Construction contractor(s), sub-contractor(s), supplier(s), manufacturer(s) |
| Contract | A contractual agreement made between Employer and Contractor |
| Site | The place(s) specified in the Contract for the project |
| Visual Standards | Visual HSE Instruction Booklet |
| Safety for Life | APMT Safety slogan |

5.2 Abbreviations

| Term | Description |
|--------------|---|
| APMT | APM Terminals |
| HSE | Health, Safety & Environment |
| GTF | APMT department: Global Technical Function |
| FIDIC | Federation Internationale des Ingenieurs-Conceils (International Federation of Consulting Engineers) |
| OHSAS | Occupational Health and Safety Assessment Series (BS OHSAS 18001 = British Standard for occupational health and safety management systems) |
| ISO | International Standards Organisation |
| HSEMP | HSE Management Plan (project specific) |
| EIA | Environmental Impact Assessment |
| PPE | Personal Protective Equipment |
| SFR | Standard Functional Requirements |
| HiPo | High Potential Incident |
| HSI | High Severity Incident |
| LTI | Lost Time Injury |

5.3 Referenced Documentation

| Code # | Title |
|--------------------|--|
| OHSAS 18001 | British Standard for occupational health and safety management systems |
| ISO 14001 | Environmental management system standard |

6 HSE Management Systems

6.1 General Requirements

The Contractor shall have in place, dedicated health, safety and environmental management systems that ensure that appropriate standards of health, safety and environment are maintained.

The Contractor shall implement policies, procedures and an appropriate culture to meet these requirements.

The Client requires the Contractor to strive for OHSAS 18001 and ISO 14001 Certification or agreed equivalent where the Contractor is engaged in projects related to APMT.

6.2 Risk Management

The Contractor shall identify Health, Safety and Environmental risks prior to exposure.

Amongst other elements of the risk assessment, the Contractor shall apply the 'hierarchy of controls' (ref. below Figure 1 as an example, and Appendix B for further explanation) making all reasonable attempts to eliminate risk, if not to mitigate exposure to prevent injury or harm to people and/or the environment.

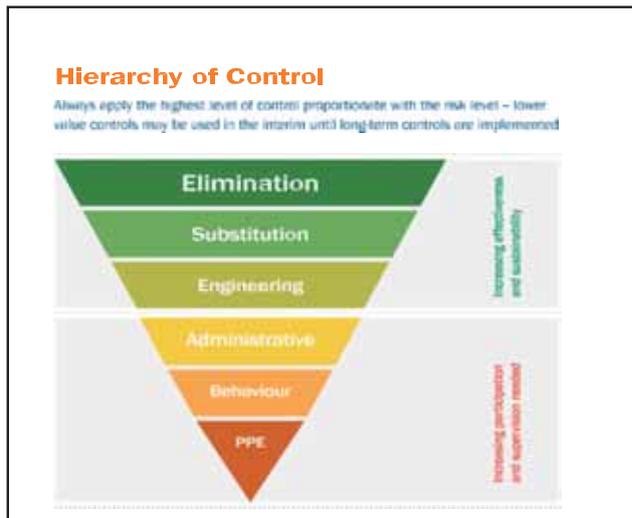


Figure 1 - Hierarchy of controls - ref. Appendix B

The Contractor shall have in place a mechanism to manage the risks that cannot be eliminated by:

- Identifying any hazards associated with its delivery and assess the associated risk;
- Implementing measures to eliminate or mitigate the risk;
- Communicating the required control measures to any persons who may be exposed;
- Continually reviewing the performance of these control measures.

6.3 HSE Management Plan

The Contractor shall within two weeks after entering into the Contract Agreement - but prior to the Commencement Date - submit a **site specific HSE Management Plan (HSEMP)** for the approval of the Employer and Engineer.

The Works shall not commence until the Engineer and Employer have accepted the HSEMP. The Contractor shall implement the accepted HSEMP. The HSEMP typically contains the elements provided in Appendix C.

The HSEMP shall remain a "live" document and be proactively reviewed, revised or extended by the Contractor throughout the Works as required.

The HSEMP will be project site specific, and will be linked to the risk management system as explained in par. 6.2.

The Contractor shall unconditionally make the HSEMP available to all parties or authorities requiring the information recorded therein.

6.4 Sub-Contractor and Supplier Management

The delivery of the works, services, or materials by parties as sub-contractors or suppliers to APMT or a contractor, presents a significant risk to APMT and the project.

Therefore the Contractor shall have in place robust mechanisms to manage their contractors. These shall include as a minimum:

- a. Systems and processes for assessing the health and safety capability of contractors;
- b. Contractual agreements that reflect and flow down (back-to-back) the Contractor's obligations to APMT;
- c. Where appropriate the inclusion of performance management mechanisms within the contract between the Contractor and its contractors;
- d. Methods to communicate and monitor the compliance of contractors delivery against APMT Project HSE Specification;
- e. Assuring systems are in place for the regular review of health, safety and environmental performance of its contractors. This shall be considered as part of the overall performance of its contractors.

6.5 Leadership

The Contractor shall demonstrate HSE management commitment to compliance with legal and regulatory requirements and to the application of the HSEMP.

The Contractor shall conduct periodic and planned HSE leadership reviews which shall be aligned with the following management responsibilities:

- The Contractor shall define, review and communicate to the workforce how the HSEMP will enable continuous risk reduction and performance improvement and, responsible and reliable operations;
- The Contractor shall demonstrate management commitment to compliance with legal and regulatory requirements, to the application of the HSEMP, and to conformance with APM Terminals requirements;
- The Contractor shall model behaviours by personal example that reinforce continuous risk reduction and performance improvement, and conduct frequent leadership site reviews to verify that risks are identified, understood and managed.

6.6 Access to Competent Advice

The Contractor shall appoint sufficient HSE resources to provide advice and monitor implementation of the HSEMP to safeguard the safety of Contractor's Personnel, Equipment, Plant, Materials and Facilities.

The HSE team members shall be professionally qualified, allowed to liaise with the Engineer and authorised to issue HSE related instructions during the Works and on Site.

Roles and responsibilities with respect to the delivery of health, safety and environment management are clearly defined throughout the Contractor's organisation.

The HSE team members shall be proficient in English and at least one of the other languages spoken on Site.

The Contractor's senior site- and corporate management shall demonstrate their commitment to robust HSE management by their monthly participation in corresponding walkabouts, audits, toolbox talks, training and events.

Such events shall introduce specific HSE themes and address corresponding high risk topics.

6.7 HSE Monitoring and Assurance

The performance of contractors and suppliers will be monitored by a combination of the regular internal HSE activities and reporting, auditing by the Employer and Engineer, and - where appropriate/required by independent bodies - to validate and verify the reports.

This shall include but not be limited to:

- Monthly reports by contractors and suppliers;
- Audits of work activities and processes, by contractors, suppliers, the Employer and Engineer;
- Other indicators such as the speed, rigour and comprehensiveness of incident investigations and the speed of corrective actions taken following investigations.

APM Terminals and the Contractor shall implement a joint programme of HSE performance reviews to assess Contractors' effectiveness in HSE Management and in meeting the HSE requirements of the project.

These reviews shall include but not be limited to:

- a. Implementation of the HSEMP;
- b. Subcontractors and suppliers HSE performance;
- c. HSE performance and deviations;
- d. Spend on HSE activities.

The Contractor shall be responsible for the planning and scheduling of these reviews. Attendance at these reviews shall be defined and mutually agreed in the HSEMP.

7 Site Control

7.1 HSE Induction

All present on site will have to receive a HSE Induction. Contractors, suppliers, the Employer, the Engineer, authorities, third parties and visitors shall only be allowed to enter the Site after being inducted.

The HSE Induction shall as a minimum consist of:

- Explanation of the site layout;
- Site-specific rules and HSE training;
- Emergency procedures;
- APMTs Construction Safety Focus Areas (ref. Appendix D);
- Site-specific risks and mitigation measures (ref. par. 6.2);
- Emergency procedures;
- Handing out and explanation of the Visual Standards (ref. Appendix E);
- Personal registration;
- Personal protective equipment (PPE) issuance and instruction.

The use of multimedia to present is encouraged.

The induction shall be made available in English and the other languages spoken on Site.

Records of all HSE inductions shall be retained for verification and auditing purposes.

The competence of personnel will be verified. Safety critical workers will be identified.

Drugs and alcohol testing shall be completed (subject to local legislation). Contractor personnel shall disclose any prescription or over the counter medications they are taking. This allows the Contractor to individually assess the inductee to ensure they are safe to complete tasks and will not injure themselves or others.

When all the above is completed a personal site pass will be issued.

7.2 Access Control

The Contractor shall be responsible for controlling access to and from the work area.

In the event that the site is exclusively controlled by one contractor, its own access control will be sufficient.

In the event of multiple contractors, a joint 'Contractor Coordination Office' shall be implemented and managed by APMT or by one of the contractors.

The Contractor shall identify and register all Personnel, Equipment and Plant entering or leaving the Site.

It shall be verified that all individuals entering the site have passed the HSE Induction (ref. paragraph 7.1) and are in possession of the Visual Standards and their adequate PPE.

All Equipment and Plant entering the Site shall be technically inspected and original certificates verified, in accordance with the Contract.

24 hour contact information shall be cited at regular intervals on the site hoarding to allow anyone needing to gain access to relevant information.

The Contractor shall safeguard during the Works and on Site the complete and physical segregation (e.g. fully fenced off, equipment and pedestrian proof) of construction and operational areas.

Signage will be prominently displayed around the inside and outside of the Site (and at all entry points). Signage should be visible, clean and maintained sufficiently. Relevant signs shall inform of the dangers of construction sites. This shall be done through the use of Visual standards and if applicable text in both English and local language(s). For a typical example, refer to Appendix F.

7.3 Method statements

The Contractor is expected to prepare Method statements for all tasks to be executed under the Contract. Method statements have to be included in the HSEMP (ref. par. 6.3).

These method statements shall include but not limited to:

- Description of the activity;
- Risk assessment (ref. par. 6.2);
- Equipment to be used;
- Critical personnel and their roles;
- Specific measures to eliminate or mitigate risks.

In the event of non-routine activities, the Contractor together with the Employer shall jointly set up a project specific 'Permit to Work' system.

7.4 Equipment

All equipment, plant, materials and facilities shall be **maintained, tested, inspected and certified**, as required, prior to their use on Site and during the Works.

Only authorised, competent and dedicated personnel shall be allowed to operate and carry out such maintenance, tests, inspections and certifications.

Records of regular maintenance, tests, inspections and certifications shall be retained on Site and be made available immediately upon request.

7.5 Emergency Procedures

The Contractor shall have clearly defined and displayed emergency procedures at the gate(s), reception, and entry of each building and work station.

These procedures shall explain what should be done in the event of an accident, fire, evacuation or other emergency conditions. As a minimum it shall include:

- Emergency contact details,
- Locations of firefighting and first aid equipment,
- Evacuation routes,
- Muster points.

The Contractor shall make and maintain arrangements whereby Contractor's Personnel can be mobilised outside normal working hours to carry out any Works in case of emergencies. The Contractor shall provide and maintain a means of emergency access to the Works or Site in agreement with the relevant emergency services or authorities.

8 Health and Safety

8.1 Input to HSEMP

Health and Safety related input shall be integrated into the contractors' site specific HSEMP (refer to paragraph 6.3).

8.2 Performance Monitoring and Reporting

The Contractor shall submit a monthly, digital safety report to the Engineer including, but not limited to, the following:

- i. Number of man-hours worked;
- ii. Number of fatalities;
- iii. Number of high severity incidents;
- iv. Number of high potential incidents;
- v. Number of lost time injuries;
- vi. Number of near misses.

The definitions for performance reporting will be made available at project level, based on the APMT in-house process for HSSE performance monitoring and reporting.

8.3 Incident Notification, Investigation and Reporting

In case of Fatality, High Potential Incidents (HiPo), High Severity Incident (HSI) or Lost Time Injury (LTI), the Contractor shall immediately give notice to the Employer and Engineer and comply with the statutory requirements prevailing in the country of the Site.

The Contractor shall also undertake, as a minimum requirement, the following:

- a. Emergency or first aid response (as applicable);
- b. Scene securing;
- c. Immediate evidence gathering (photographs, equipment logs, interviews, etc.);
- d. Incident statement;
- e. Investigation planning;
- f. Investigation (scene visit, drawings, photographs, records' check, interviews, equipment tests, etc.);
- g. Analysis including root cause identification;
- h. Reporting (investigation method, incident description, time sequence, immediate causes, underlying causes, root causes, recommendations);
- i. Corrective actions;
- j. Review and close-out meetings.

In the event that a serious incident occurs the Project Specific Reporting protocol from the HSEMP will be followed. Therefore, if a serious incident occurs having the potential to directly affect APMT, it will have to be reported to meet the timeline indicated in Table 1 below.

The categories of incidents are described in Table 2 below.

The project- or terminal Managing Director shall notify in the following ways:

| Type of Incident | Initial Notification | Investigation Report and Learning Pack |
|------------------|---|--|
| Fatality | Immediate to SMT Member and to Heads of HSSE and Global Technical | Within 28 days (where possible) |
| High Severity | Immediate to SMT Member and to Heads of HSSE and Global Technical | Within 28 days |
| High Potential | Within 24 hours to SMT Member and to Heads of HSSE and Global Technical | Within 28 days |

Table 1 - Incident reporting timelines

| Type of Incident | Description |
|------------------------------|---|
| Fatality | A death directly resulting from a work-related injury regardless of time between the injury and death. |
| High Severity Incident (HSI) | Work-related Lost Time Injury which had the potential to cause a serious/extensive injuries (e.g. permanent disability/ amputations and/or requiring resuscitation), or a fatality |
| High Potential | Incident which had the potential to result in: <ul style="list-style-type: none"> • Serious/extensive injuries or a fatality. • Spill of hazardous materials with volume >10,000 l or mass >10,000 kg |
| Lost Time Injury (LTI) | Work-related injury which results in a person being unfit for work on the day or shift after the day of occurrence of the occupational injury. This 'day' includes rest days, weekends, leave days, public holidays or days after ceasing employment. |
| Near Miss | An event that had the potential to cause human injury, environmental or equipment damage, or an interruption to normal operation. |

Table 2 - Type of Incidents

Contractor(s) will co-operate with APMT in the investigation of all serious incidents and all details related to incidents and investigations will be shared with APMT.

3.4 Competence

Training and competence is essential to ensuring the safe delivery of high risk tasks, therefore as a minimum the Contractor shall ensure that the following is applied:

- That every person conducting work for or on behalf of APMT has received appropriate training for the task they are designated to undertake;
- Mechanisms are in place to ensure that high risk tasks are only completed by those that are trained and competent e.g. working at height, driving and lifting operations. This shall include permit to work systems where applicable;
- Training shall be fit for purpose for high risk tasks, meaning that it shall be in an appropriate language and delivered via appropriate means for the target audience;
- Appropriate training records are available for inspection by APMT at any time.

3.5 Engagement

The Contractor shall engage with its employees on a regular basis. Engagement can take place during start of shift briefings, tool-box talks, safety meetings and safety walkabouts:

- A start of shift briefing shall be held to ensure employees are informed. Explicit use shall be made of the large warning board required at every work station. Each safety talk shall be duly documented by the Contractor;
- A monthly programme of Tool Box talks will be planned and maintained through the works ensuring relevant topics are addressed at the appropriate time;
- A monthly safety meeting is held involving all relevant parties to allow management to engage, share, learn and consult with employees about safety topics. Records should be kept of such;
- A weekly joint safety walkabout will be led by the Contractor immediately after safety meetings with the Employer and the Engineer to discuss the above safety reports and any other health and safety issues as necessary.

3.6 Health

The Contractor shall be responsible to maintain health and safety standards at Site. The Contractor shall take a pro-active approach focussed on preventing an unhealthy and unsafe work environment.

The Contractor shall provide and maintain at each main area of the Site **first aid** and **lifesaving** appliances and equipment. All such facilities shall be for the use of the Contractor's and Employer's Personnel.

Contractors shall have adequate numbers of Personnel trained, certified and skilled in giving first aid and using lifesaving appliances and equipment. The Contractor shall assure that at all times there are sufficient numbers of first aiders present on Site.

The Contractor shall ensure that an ambulance service is available at the Site ready for immediate use and suitable for emergencies, first aid, life support and pre-hospital care.

The Contractor shall also make appropriate arrangements with nearby medical facilities or hospitals to ensure the efficient evacuation of injured Contractor's and Employer's Personnel.

8.7 Personal Protective Equipment

Contractors will identify HSE risks, eliminate these where possible, and develop a safe system of work where they cannot be eliminated.

As a last line of defence, the provision of personal protective equipment (PPE) is required. This shall be adequate to the works and provided PRIOR to work commencing.

Personnel shall be adequately trained and orientated in the use of their adequate PPE and know what to do in the event that they have a concern.

The Contractor shall provide PPE free of charge, store and maintain such PPE to an international standard, and conform to local regulations.

8.8 Transportation

The Contractor shall evaluate and manage transportation risks appropriate to the site and where applicable covering land-, sea- and air travel, to prevent injury to people and/or loss or damage to equipment, property or the environment.

The contractor shall systematically identify transport hazards, assess risk, and implement and maintain risk reduction measures identified as necessary to manage the risk.

Transport Hazards include but are not limited to road motor vehicles, bicycles, rail, ship, and aircraft travel, and community impacts.

Every effort will be made to keep pedestrians safe, inside vehicles, and off haulage roads.

Transportation specific signage will be prominently displayed around the inside and outside of the Site, at all entry points.

9 Environment

9.1 Input to HSEMP

Environmental plans and procedures shall be integrated into the Contractors' HSEMP.

The Contractor shall develop and implement management plans and procedures to meet relevant APM Terminals, legal and regulatory requirements including environmental commitments included in the project Environmental Impact Assessment (EIA).

The Contractors' plans and procedures shall avoid, minimise or mitigate those environmental impacts assessed as being relevant to their work, including:

- a) Impacts as identified through APM Terminals or competent authority produced EIAs, and other technical studies,
- b) Environmental aspects and impacts as identified through APM Terminals or the Contractors' HSEMP.

Environmental plans and procedures shall be integrated into the Contractors' HSEMP.

Where APM Terminals has previously completed EIA(s), they will provide the Contractor with a list of mandatory environmental commitments and requirements (stipulated in those EIAs) which the Contractor shall deliver or meet as appropriate.

Where the project work includes activities that APM Terminals considers of particular significance to environmental issues, APM Terminals shall, as considered appropriate, advise the Contractor of necessary additional specific responsibilities and requirements.

9.2 Performance Monitoring and Reporting

The Contractor shall submit a monthly, digital Environmental report to the Engineer including, but not limited to, the following (where applicable to the project scope):

- i. Spills of Hydrocarbon-based Liquids and Chemicals (Number and Volume in litres);
- ii. Fuel Use by type (e.g. IFO, LPG, Diesel) (metric tonnes per type);
- iii. Grid Energy Consumption (i.e. Electricity and/or District Heating) (kWh/Gj);
- iv. Refrigerants Used by Name (e.g. R-22, R-134a) (metric tonnes);
- v. Water Use and Wastewater Discharges:
 - a. Water Use by Source (Municipal Supplies, Surface- and Ground-water Abstractions, Rainwater Harvesting) (litres);
 - b. Wastewater Discharges by Location (e.g. treated and discharged at site and/or to municipal sewers) (litres);
- vi. Waste Generation (metric tonnes, % recycled):
 - a. Non-hazardous Waste generated by stream (metric tonnes, % recycled);
 - b. Hazardous Waste generated by stream (metric tonnes, % recycled).

The definitions for performance reporting will be made available at project level, based on the APMT in-house process for HSSE performance monitoring and reporting.

9.3 Incident Notification, Investigation and Reporting

In case of a hydrocarbon-based liquid or chemical spill >10 litres, release of a fuel gas or refrigerant >1kg, or a regulatory non-compliance, the Contractor shall immediately give notice to the Employer and Engineer and comply with the statutory requirements prevailing in the country of the Site.

The Contractor shall also undertake, as a minimum requirement, the following for spills between 10 and 100 litres in volume, and gas releases between 1 and 10kg in mass:

- a. Emergency or first aid response (as applicable);
- b. Scene securing;
- c. Immediate evidence gathering (photographs, equipment logs, interviews, etc.);
- d. Incident statement.

Where a hydrocarbon-based liquid or chemical spill occurs >100 litres, where a gas release >10kg occurs, or where it is identified there was the potential for such a quantity, or a regulatory non-compliance occurs, the Contractor shall additionally:

- e. Plan and undertake an investigation (including scene visit, drawings, photographs, records' check, interviews, equipment tests, etc.);
- f. Compliance incident analysis including identification of initiating factors and root causes;
- g. Document and formally issue Incident Investigation (investigation method, incident description, time sequence, immediate causes, underlying causes, root causes, recommendations);
- h. Identify, assign, track and close-out of all corrective actions in a timely manner.

In the event that a severe incident occurs a Project Specific Reporting protocol will be agreed. A severe incident is defined as a spill of >10,000 litres of hydrocarbon-based fluids or chemicals, >1,000kg release of fuel gas or refrigerant, a regulatory non-compliance with risk of higher regulatory penalty (e.g. civil penalties, criminal proceedings, loss of license to operate).

Contractor(s) will co-operate with APM Terminals in the investigation of all severe incidents and all details related to incidents and investigations will be shared with APM Terminals. The Contractor acknowledges these will be shared with APM Terminals Corporate HQ.

10 External audits

The Contractor shall appoint external, registered, competent, independent and international auditors to carry out half-yearly HSE audits of the Site and Works.

The Employer shall also be entitled, at any time, to carry out their own HSE audits of the Site and Works.

The findings of the external audits shall be unconditionally and immediately shared with all Parties on Site and cascaded to all Contractor's Personnel.

11 Cost and Payment

The Contractor shall be responsible for the procurement, operation, maintenance, removal and disposal of all HSE related equipment, plant, materials and facilities.

The Contractor shall also be responsible for the recruitment, training, management, removal and replacement of their HSE related staff.

Any cost or time impact as result of this fulfilment shall be for the account of the Contractor. All such cost shall be deemed to be included in the total Contract Price.

If requested or required the Contractor shall detail the cost of HSE provisions in a corresponding Bill of Quantities.

12 Legal and Regulatory Compliance

The Contractor shall identify and document all applicable legal and regulatory HSE requirements for the Site. The Contractor shall take all necessary means to identify compliance tasks to meet and comply with these laws and regulations.

Evidence of completion of these compliance tasks will be retained and be immediately available for review.

13 Consequences

The fulfilment of all provisions in this document specified shall not relieve the Contractor of any of his duties or responsibilities.

Violation of this Specification by the Contractor shall result in a HSE warning. Accretion of three warnings shall lead to the immediate, unconditional and indefinite removal of the corresponding personnel from Site.

The Employer and Engineer shall have the right to order an immediate halt to any activities or circumstances that are deemed to be a risk to the environment or to the health or safety of Contractor's Personnel, visitors, adjacent communities, the Site or the Works.

The Contractor shall resume the Works only after receiving a corresponding instruction from the Engineer.

Appendix A APMT HSE Policy**Health, Safety, Environment Policy****Objectives**

We do not accept that incidents and injuries are part of our business.

We will not compromise our health, safety and environmental performance for profit or production.

We hold our leaders accountable for the health, safety and environmental performance of our business.

We expect our managers and supervisors to provide effective leadership whilst recognizing that good HSE behavior is the responsibility of all those who work for us.

We focus on the prevention of incidents before they happen by proactive risk assessment and mitigation using the hierarchy of controls.

We strive for a no-blame culture but cannot accept intentional neglect or disregard for our HSE rules.

All APM Terminals companies must manage HSE in line with this Policy irrespective of whether it concerns our own employees, contractors or any other external parties working on or visiting any of our facilities.

Every APM Terminals company must:

Have a systematic approach to management of HSE risks.

Comply with local laws and regulations as well as Global APM Terminals Standards.

Set plans and targets for continuous improvement and measure, appraise and report on performance.

Report all HSE incidents and near misses.

Investigate incidents to identify learnings and prevent recurrence.

Ensure employees are competent to do their tasks, and provide adequate HSE training.

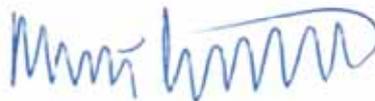
Share HSE performance and learnings with staff, suppliers, and customers and the APM Terminals community.

Ensure adequate resources are allocated to management of HSE risks.

Include HSE performance as part of employee appraisals.

Requires contractors to manage HSE in line with this Policy.

Requires joint ventures under its control to apply this policy and use its influence to promote it in its other ventures.



Morten Engelstoft
Chief Executive Officer

APM TERMINALS  **Lifting Global Trade.**

Appendix B Hierarchy of Control

Control Effectiveness Guidelines

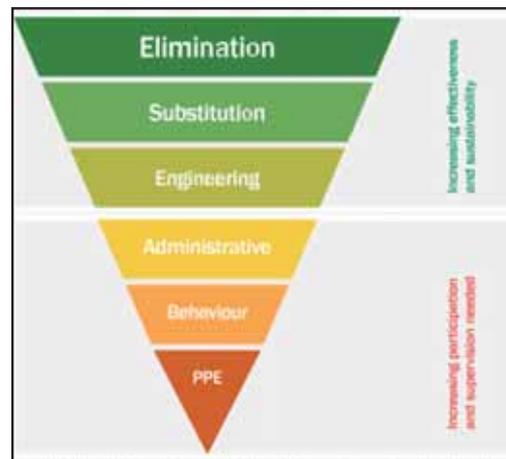
Consider the Controls / Barriers

Controls shall be designed in accordance with their potential for effective risk reduction and effectiveness and be approved at the appropriate level in the organization.

The **Hierarchy of Controls** lists the risk reduction approaches in order of the risk reduction effectiveness.

Consideration of the Hierarchy of Controls assists to identify the most effective controls for a priority unwanted event, recognising that 'behaviour' and 'PPE' are the least effective approaches.

- **Eliminate:** the complete elimination of the hazard by design.
- **Substitute:** replacing the hazard, material or process with a less hazardous one, or significantly reducing the magnitude of the hazard or material so consequences are greatly reduced.
- **Engineer:** design in controls or redesign the equipment or work process. Placing a physical barrier on the hazard by guarding or enclosing it.
- **Administrative:** providing control such as training and procedures.
- **Behaviour:** Engagement of personnel to promote wanted and correct unwanted behaviours.
- **Protect with Personal Protective Equipment (PPE):** use of appropriate and properly fitted PPE where other controls are not practical.



Control Measure Hierarchy

The hierarchy of controls & effectiveness



Appendix C Typical content of HSE Management Plan

Health Safety and Environment Management Plan expectations:

The extent of the plan will be determined by the risk posed by these activities which shall be assessed by risk assessment.

This risk assessment shall cover the full scope of the activities to be undertaken. The size and length should be in proportion to the project risk and scope.

The control measures shall be considered for the project in question and therefore shall take into account local environment, working practices and regulations.

The following is a list of typical contents for the plan:

- Scope of the work to be completed;
- Organisation chart, key contacts and responsibilities for health, safety and welfare at project level;
- Risk assessments, method statements and safe systems of work that detail how the tasks will be completed safely. These shall be specific to the project and location risk factors;
- Relevant accreditations e.g. OHSAS 18001; ISO14001 or associated programmes;
- Resource plan to ensure competent, qualified personnel are available;
- Training matrix detailing what health, safety & environment competencies are required by employees and contractors;
- Personal protective equipment selection, maintenance and record keeping;
- Work equipment / mobile plant intended for use, maintenance programme and pre use checks;
- Monitoring, auditing, inspection, certification and reporting processes that will be implemented to ensure that the required standards are achieved;
- Emergency Response Plan;
- Incident reporting, investigation procedures and learning pack development;
- On site medical provision and its maintenance;
- Health & welfare provisions and maintenance;
- Integration of local legislation / codes of practice as well as APMT Policy and Standards;
- Separate appendix: Workplace Transport plan.

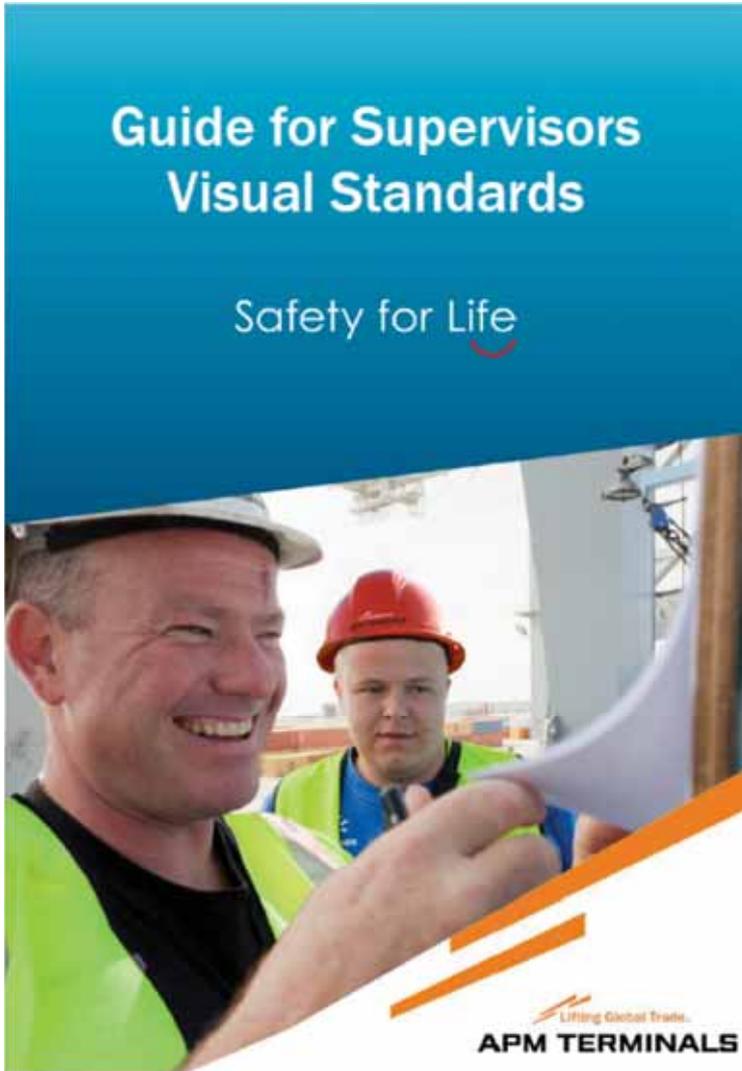
Appendix D Construction safety - Focus Areas

Construction Safety Focus Areas

- 1) Work at Height
- 2) Lifting Operations
- 3) Mobile Plant & Equipment
- 4) Working Near or Above Water
- 5) Transportation
- 6) Excavation
- 7) Confined Space Entry
- 8) Stored Energy



Appendix E Visual Standards



(Cover page only, re-drafting of the booklet is in progress, May 2017)

Appendix F Example of customised warning board

