HSSE CONTRACT SPECIFICATIONS

ANNEX TO CONTRACT

Pelabuhan Tanjung Pelepas

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INTRODUCTION

This document is established as the health, safety, security and environment (HSSE) compliance obligation requirements for Contractor during the tendering process. This document is also the 4th Level HSSE document in the contract structure as shown in Figure 1 below. The Contractor shall refer to this document extensively and takes into account all resources needed while preparing their HSSE proposal for tender submission base on the stipulated requirements.

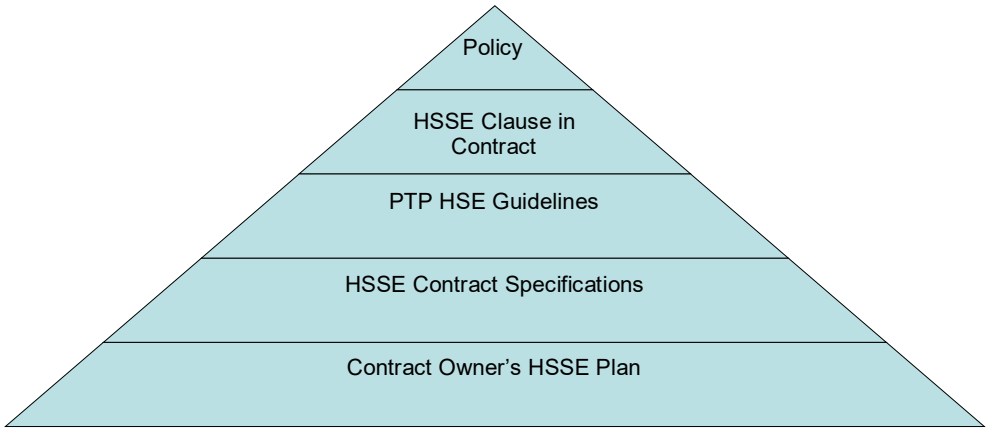

Figure 1: Overall HSSE documents level in the contract structure

The Contractor shall be aware that the PTP considers HSSE to be of paramount importance. The Contractor shall therefore take all steps to minimize and where possible eliminates safety risks in performance of the Works/Services. All Works/Services shall be carried out in a safe manner and free of any danger. The Contractor will ensure safe operations for the duration of the Works/Services, as specified and shown, including the following:

1. In accordance with applicable regulations and generally accepted construction practices, the Contractor shall be solely and completely responsible for conditions of the Work Site, including safety of all persons and property during performance of Work/Services.
2. Full compliance with all Federal, State and local laws, ordinances, statutes, rules and regulations relating to the safety of the public and workers.
3. Compliance with all the requirements shall not relieve the Contractor from other obligations imposed elsewhere in Contract and/or by law and regulations.

PTPs' commitment to HSSE translates into (see Corporate HSE Policy and Security Policy in attachments):

1. License to operate
2. No hierarchy
3. No compromise
4. Not optional

PART I: GENERAL HSE REQUIREMENTS

1. Compliance to Laws/Regulations/Company Requirements

Contractor shall comply with all applicable Health, Safety and Environmental (HSE) laws and regulations including fire and security, which are applicable to the location where the works/services are being carried out.

Contractor shall indemnify PTP against all legal costs, fines and compounds imposed and claims and damages incurred as a result of breach or non-non-compliance to any relevant laws and regulations. Contractor shall comply at all times with the requirements as set forth by PTP in its policies, operating standards, any special instructions, and all requirements stipulated in this contract. These requirements are intended to supplement any known or ought to be known laws and regulations applicable at the location where the works are being carried out.

Contractor shall take all necessary HSE precautions related to or arising out of the performance of the contract in order to protect the work, the personnel and property of PTP, Contractor, subcontractor, all third parties and public from the hazards associated with the work.

2. Contractor Written Policy/Organization

Contractor shall acknowledge PTP's strong commitment to HSE and affirm that it has a written HSE policy which is a standard comparable to PTP's HSE policy and which has been signed and is actively supported and endorsed by Contractor's management.

Contractor shall further affirm that its HSE policy is widely disseminated and understood among Contractor and subcontractor's employees.

3. Protection of Employees, Public, Assets and Environment

Contractor shall protect the safety and health of workers and people living or working near the project site from potential hazards created by the Works/Services. Contractor, at its own cost, must take all necessary precautions to protect the public and minimise disturbance and inconvenience to the public resulting from performance of the Works/Services.

Throughout performance of the Works/Services, Contractor shall conduct all operations in such a way as to minimize any impact upon the natural environment including compliance with all laws, regulations and rules applicable to the site. Contractor agrees to indemnify PTP, its officers, agents and employees for all claims, damage costs and penalties relating to any environmental damage or loss or non-compliance with any laws or regulations arising out of Contractor's and/or sub-contractor's performance of the Works/Services.

4. Right to Stop Work

Any PTP's representative or his designated representatives shall have the right to prohibit commencement of Works/Services or to stop any Works/Services in progress if the equipment, machinery, personnel or work conditions are considered at PTP's discretion to be unsafe or not to be in compliance with any applicable rules, regulations and procedures.

Stoppage of the work shall be at contractor's expense until Contractor has satisfactorily rectified such unsafe acts and condition. In the event of serious or repeated infringements, PTP may terminate the contract without compensation.

Any of the Contractor's Personnel shall have the right to stop any Works/Services when they are considered unsafe and such stoppage shall come at no personal consequences to PTP, unless clear misuse of this right is proven by evidence.

5. Maintain Equipment and Machinery in a Safe Condition

Contractor shall ensure that all its machinery, equipment, facilities and other items in any way associated with or utilised in the Works/Services are fit for use, certified as required and maintained in a safe and good working condition and in accordance with any requirement under the law.

6. Risk Management and Hazards Identification

Contractor shall make an initial assessment of the HSE risks involved in the execution of the Works/Services. The focus of the assessment should be to evaluate the inherent hazards in conducting the work and the potential adverse consequence of an accident to the workforce, the public and the environment, company assets and reputation.

The risk assessment register shall be established by following the Job Safety Analysis (JSA) methodology and shall be submitted to PTP together with the HSE plan and agreed upon execution process of project.

Contractor shall take appropriate measures to prevent incidents from occurring and to minimise the consequence of an event should it occur.

Contractor shall conduct HSE inspections and audits to ensure that such preventive measures are carried out. Contractor shall promptly conform to all recommendations made pursuant to the said inspections and audits.

7. Competent Personnel

Contractor shall ensure that competent personnel are fully trained and certified to carry out the task of operating all machinery, equipment, and tools. Contractor shall provide an adequate level of technical and HSE related training conducted by a recognised training institution for all relevant personnel in connection with the Work/Services. All Contractor's supervisory personnel shall attend relevant HSE training and be competent in hazard identification.

Contractor shall ensure that all its and its subcontractor's personnel engaged in the Works/Services are healthy and fit, and possess the experience and skill required to perform the Works/Services.

8. HSE Awareness

Contractor shall be responsible for maintaining and enhancing the HSE awareness among its personnel and subcontractor's personnel, including arranging safety induction, toolbox, regular HSE meetings and emergency drills.

Findings of hazard identification including Job Safety Analysis shall be communicated to Contractor's personnel. Copies of minutes of Contractor safety meetings shall be submitted to PTP every month.

9. Incident Reporting

Contractor shall report to PTP immediately of the occurrence of any incident or accident including near misses with an approved incident reporting form. Contractor shall also alert the appointed consultants, PTP Emergency Response, port police and /or other authorities relevant to the incidents or accidents. The Contractor shall report any incidents under its own jurisdiction to the appropriate authorities and when any incidents occur within PTP's premises, the Contractor shall assist PTP in reporting such accidents and incidents to the appropriate authorities as required.

All incidents or accidents that result in, or have the potential to cause, serious injury or property damage must be suitably investigated by the Contractor, Consultant (if applicable) and PTP.

Contractor shall maintain accurate incident and injury reports and shall comply with PTP's requests for information relating to accidents, injury or illnesses.

10. Housekeeping

Contractor shall ensure that good housekeeping is maintained continuously throughout the duration of the Works/Services. Due regards shall be paid to proper disposal of scrap material, tidiness, clearance of access ways and emergency exits.

Access and egress of all exits, fire and safety equipment, and work areas must be kept clear of obstructions at all times. Special attention must be given to maintaining clear walkways, removal of slippery and tripping hazards, securing or removing of loose materials at height, and proper storage of materials. Oily or chemical soaked rags must be disposed of in a proper manner. All housekeeping shall be at Contractor's cost.

PART II - SPECIFIC HSE REQUIREMENTS

1. Safety and Health Officer/Safety Supervisor/Consultant

Contractor shall, at its own cost, provide such numbers of qualified Safety and Health Officers (SHO) or supervisors who will be responsible to provide guidance and advice pertaining to Health, Safety and Environment (HSE) requirements of the Works/Services. The SHO or supervisors shall guide the Contractor's management on hazard assessment and measures, with equal diligence being paid to fulfillment of the contractual specifications.

In addition to the ongoing monitoring of the site, the Contractor SHO or supervisors shall also perform a formal inspection of the site at least once every week to identify and correct any hazardous conditions noted. A written record of all inspections and their status of action follow-ups shall be given to PTP's representative.

Site or Contractor's SHO must not be involved or assigned to other part-time work other than as the HSE officer.

If not previously agreed at contracting stage, prior to start of any Works/Services, the Contractor shall submit the CV of the proposed SHO or supervisors for PTP's approval.

Consultant shall be responsible to provide technical advise, to communicate and to report to PTP at soonest time when during any phases of project execution any gaps are identified against the PTP's compliance obligations. Consultant (if applicable) shall have the authority to act on behalf of PTP during their absence and take Consequence Management in order to close the gaps.

Contractor shall also ensure that full time safety supervision coverage is provided with a ratio of 1:100 [one (1) full time Safety Supervisor / Coordinator coverage is provided with a ratio of 1:100 [one (1) Safety Supervisor / Coordinator for every 100 employees].

2. Project HSE Plan

Prior to any Works/Services being carried out on site, the Contractor shall ensure a project specific HSE plan is agreed with PTP which, as a **MINIMUM** takes into consideration and includes the followings:

- HSE policy, targets and requirements
- Prevailing laws and regulations
- Contractor's HSE policy
- Contractor's organization including positions for HSE manager and SHO
- HSE responsibilities of Contractor's key personnel
- Risk assessments including preventive and mitigating measures
- Description and schedule of HSE activities
- Incident reporting and investigation
- Emergency response plan

Contractor shall follow the template as published in the PTP's website (www.ptp.com.my/services/hse) when developing the HSE plan.

PTP's review or comments on such plan shall not relieve the Contractor from its obligations under the Contract and at law, nor shall such review and comments to be construed as limiting in any manner the Contractor's obligations to undertake any action which may be necessary to

establish and maintain safe working conditions at the location where the works are being carried out.

3. Equipment Safety Inspections

Prior to start of Works/Services, Contractor is required to inspect the equipment and machinery required in connection with the Works/Services including but not limited to cranes, trucks, forklifts, etc., to ensure that the Works/Services will be performed under safe condition.

In addition, Contractor shall maintain and perform continuous safety inspection throughout the Works/Services and shall promptly implement all recommendations made pursuant to the said inspection.

PTP shall have the right to conduct its own safety audit or inspection at worksite. Contractor shall comply with all recommendations arising from such audit or inspection.

Contractor shall ensure that all fuel powered and electrical equipment working in the vicinity of flammable vapours is equipped with proper ignition protective devices.

Contractor shall ensure that only permitted personnel by way of previous technical training and familiarisation are allowed to operate and/or maintain equipment and machinery.

4. Personal Protective Equipment (PPE)

Contractor shall, at its own cost, supply its personnel and subcontractor's personnel required in connection with the Works/Services with adequate PPE and maintain enforcement on the use of such PPE.

Contractor shall purchase PPE in accordance with the specification as per attachment - PPE STANDARDS & TECHNICAL SPECIFICATIONS

Contractor and subcontractors shall not charge its personnel for such PPE.

5. Mechanical Equipment Operation

Contractor shall upon arrival at the worksite, inspect all mechanical construction equipment that is to be utilised in the Works/Services.

This equipment may include but is not limited to the following:

- Cranes
- Fork lifts
- Self-Loading Trucks
- Trailers and Prime Movers
- Compressors
- Temporary Electrical Distribution Boards
- Scaffolding equipment
- Rigging equipment
- Man-cages/Personal Baskets
- Aerial Work Platforms

All remedial work (or replacement) on the inspected equipment shall be carried out at Contractor's own cost.

All equipment inspected and accepted for use on the work shall be clearly identified by a tagging system.

6. Confined Space

Confined space entry must be authorised through PTP's Permit to Work ("PTW") approval process. Contractor shall take precautions which include but not limited to gas/oxygen tests, PPE requirement, respiratory equipment, isolation of connections to confined space, provision of ventilation and making sure confined space is free from fumes, placing person on standby and ensuring the availability of rescue equipment and team.

The Contractor SHO or supervisor shall ensure that all necessary precautions and protective measures are strictly implemented.

Contractor's personnel shall be certified to be medically fit before they are allowed to work in any confined space.

The Contractor and Subcontractor shall adhere to all confined space work rules and regulations including but not limited to the Industrial Code of Practice for Safe Working in Confined Space, 2010.

7. Permit to Work

Contractor shall adhere to PTP's PTW procedure should the Contractor's activities require the application of such Job Permits and PTW. This includes any general work by a Contractor; as well as specific signoff for high risk activities such as hot work, cold work, lifting, excavation, confined space entry, electrical permit and abnormal liftings.

PTP's area owner shall acknowledge the work activity and authorized PTP personnel shall approve the PTW. The Contractor shall continuously enforce the conditions of such permits including renewing its validity. Contractor's supervisors shall attend PTW training. Any costs incurred in the application of PTW shall be borne by Contractor.

8. Tools and Equipment

Contractor shall ensure that all Contractor's machinery, tools and equipment, facilities, and other items associated with the works whether purchased or rented are maintained in a safe condition and to be operated by competent operators. Tools shall only be used for the job they were designed to perform. All guards must be fitted and shall be in good condition at all times. All grinding discs must be checked for correct size and allowable speed as well as for any pre-existing damages prior to fitting.

Electrically powered tools shall meet the hazardous zones requirement where applicable. All electric cables shall be industrial type. Use of domestic electric cables is prohibited.

Contractor shall repair or replace defective tools and equipment at its own cost.

Appropriate personal protective equipment must be worn at all times when using any tool or equipment.

9. Compressed Gas Cylinders

Contractor shall ensure that:

- Compressed gas cylinders are stored, transported or used shall be in an upright position and secured to some substantial object or structure by a chain or other suitable means capable of supporting the weight of the cylinder. This applies to all cylinders, whether empty or full.
- Cylinder valves shall be closed and hoses depressurized when cylinders are not in use.
- Cylinders shall have protective valve caps in place while they are being transported/stored.
- Cylinders shall be returned promptly to a suitable storage area after use. They shall not be left at any worksite.
- Cylinder storage areas should be kept away from general traffic paths and must not be adjacent to vehicle paths.
- Flammable gases and oxygen cylinders must not be stored in close proximity unless separated by a non-combustible wall.
- Cylinders may only be hoisted when enclosed in an approved box or cradle within which they are securely fastened.
- Cylinders must be identified by a colour code in accordance with Malaysian or respective national standards.
- Gas welding cylinders shall have hose check valve (non-return valves), which allow gases to the blowpipe, but not back from it.
- Flashback arrestors shall be installed to quench flashback flames and cut off the gas flow automatically, in both oxygen and fuel gas outlet lines.

10. Welding and Cutting

Contractor shall ensure only competent, authorized workers be allowed to use welding equipment.

Hard hats are required to be worn by welders during actual process of welding. However, if there is restriction due to narrow space, Contractor shall conduct risk assessment with PTP's HSE Department to determine whether not wearing the hard hats may not cause head injury and determine other control which deem effective to reduce the probability of accident to occur.

Contractor shall ensure suitable precautions against exposure of welding hazards such as excessive ultraviolet radiation, fire, or dusts.

Welding, and/or flame cutting without exception of areas shall only be done under the control of a PTW.

Contractor shall provide adequate number of suitable fire extinguishers and welding blankets at a welding site. Welders must be competent to use these extinguishers.

11. Abrasive Wheels

Contractor shall ensure that safety protection in the form of goggles and /or shields are provided and utilised by the personnel working with grinding machines and abrasive wheels. When changing discs on a portable grinder, it is imperative that a suitable replacement disc is fitted and placed in the correct manner. Contractor shall ensure only trained and competent personnel are permitted to carry out this task.

12. Blasting/High Pressurized Blast

Blasting in general is a high risk activity due to stored energy presence inside the operating unfired pressure vessel, Thus, Contractor shall in advance submit the method of statement and risk assessment to PTP. PTP will then advice on the necessary safe measures which include PTW needed for any blasting activity. Contractor shall provide the blaster with an approved air mask and oil free air supply.

Associated workers and any other personnel within the blasting area must wear approved respiratory protection. The blasting gun must have a 'dead man' safety device operated by the blaster. Under no circumstances shall the device be tied back.

Contractor shall made efforts to minimize the exposure of the blasting works to the surrounding environment. Protective shield shall be erected and notice board shall be posted in order to prevent exposure of the blasting grit.

13. Chemicals

Contractor shall ensure all requirements for storage, handling and personal protection outlined in the material safety data sheet are followed. When in doubt concerning these requirements, the Contractor shall consult PTP's HSE personnel.

Solvents, cleaners and cleaning agents must not be stored or used in unventilated areas or in immediate proximity to any sources of ignition. Quantities of such materials greater than needed for one day's work must be stored outside the work area in a proper storage facility. Smoking (including the use of e-cigarette or vaping devices) is not permitted at all time while using or in the vicinity of any such chemical.

14. Electrical Safety/Power Source

Contractor's equipment and facilities of electrical nature shall be fit for purpose and appropriate for the environment in which it shall be used. All portable electrical equipment shall be properly maintained and visibly display a valid SIRIM (or equivalent) sticker and "electrical test" label.

The Contractor shall pay particular attention to the safety of access on land and the danger from electrical cables being led to the Works/Services. Suitable tripping devices shall be installed and maintained regularly by an approved electrician. No earth connections to handrails shall be made.

Contractor shall also verify energy isolation through lockout tagout (LOTO) prior services or maintenance of electrical equipment and facilities.

15. Excavation

Contractor shall ensure that all excavation works shall meet the following requirements as a minimum:

- Excavations work shall be subjected to a PTW.
- Prior to embarking excavation work, proper design and plan shall be drawn up taking into account the soil type and the weather conditions and proximity to facilities as well as any existing underground services.
- Walkways between trenches should be kept clear of obstruction.
- A competent person must inspect all excavations, shafts, tunnels and earthworks of any description each day when persons are working.
- A standby person shall be made available at all times equipped with all necessary safety equipment.
- All excavation exceeding 1.5 meters shall be shored. For excavation exceeding 2 meters deep, a confined space permit shall be secured.
- No mechanical excavation within 1 meter of the existing service is allowed. All underground services must be hand exposed and identified.

16. Barricade, Platforms, Guardrails & Signage

Contractor shall provide adequate hard barricades, covers, guardrails, signal flag persons or other appropriate warning devices to protect personnel near any hazardous operations or overhead work. Temporary covers for floor openings shall be firmly fastened and clearly identified by warning signs. All elevated work areas, walkways, platforms etc. whether permanent or temporary, shall be protected by an approved guardrail (consisting of an upper and intermediate rail and toe board) and shall provide a sturdy working space. The contractor shall provide all the necessary signs, barriers, flag persons, etc. to protect the general public from exposure to injury from the work.

All legislated and PTP requirements for warning signs and/or barriers adjacent to public roads must be strictly adhered to.

The Contractor shall, install and maintain the standard dimension of 300mm by 400 mm (minimum) safety warning signs. The signage must be in dual language of English and Bahasa Malaysia. The signage's must be visible and installed at proper locations.

17. Scaffold/Unprotected Edges

A safe means of access must be provided for any Works/Services to be carried out at a height greater than 2 meters above ground. If a suitable permanent access is not available, a well - designed, erected, inspected and maintained scaffold will provide a safe means of access and safe working areas.

Additionally, safe access to scaffold work platforms by ladder must be provided. All scaffoldings shall be constructed in accordance with B.S 5973 Code of Practice for Access and Working Scaffolds and Special Scaffold Structures in Steel or its equivalent.

All scaffolding materials and components shall be as follows:

a. Scaffold tubes

All tubes must be galvanized steel 48.3mm OD and wall thickness 4mm comply to BS 1139 Part 1, 1982 and free from cracks, splits or excessive corrosion and straight. Black steel or aluminum scaffold not allowed in offshore.

b. Coupling and fittings

They must be of sound construction, comply with BS 1139, Part 2. Do not mix tubular and fittings of different standards.

c. Board or decking

All timber scaffold boards shall meet the recommended BS 2842:1981 or regulation 87 of Factory and Machinery Act 1967, regulation 1986.

d. Ladders

Ladders shall meet BS 1129:1982.

e. Frame or tubular scaffold

Only proprietary steel frame or tubular scaffold of sound design and construction are allowed as per manufacturer specification.

f. Inspection

A scaffold inspector shall inspect all scaffold material. Every metal tube scaffold exceeding 40 meters in height and every other scaffold exceeding 15 meters in height shall be constructed in accordance with the design and drawings of a Professional Engineer.

g. Erection

Scaffolds must only be erected, altered or dismantled by competent scaffolder under supervision of a charge hand scaffolder. The erection area shall be isolated with hard type barricade with relevant safety signage. All inspection of any scaffold during erection, alteration or every severe weather changes shall be done by a scaffold inspector. After the inspection is confirmed safe, the scaffold inspector shall put the durable green tag or red tag for unsafe scaffolds. The scaffolds only valid for one week and shall be recorded on the green tag and scaffolds register. This register will alert the scaffold inspector for re-inspection and subject for audit.

For unprotected sides and edges the Contractor shall supply, install and erect guardrail, barricade and toe board (where required) to exposed edges/opening but not limited to:

a) Building perimeter openings
b) Lift shaft openings
c) Floor openings
d) Working platform
e) Loading platform

18. Site Office and Welfare Facilities

Contractor shall maintain comfortable working condition in the site office and welfare facilities as follows:

- Temp 20-26 deg C
- Humidity 40-60%
- Adequate ventilation
- No smoking policy except at the designated smoking areas
- Adequate lighting comfortable to the eyes at 400 lux
- Office space at 6.25 sq.m per work station
- Welfare facilities e.g.portable toilets, eating area, drinking water
- Daily housekeeping
- Clear passage ways, remove tripping hazards
- Emergency plans for evacuation
- Ensure car park well-lit and control of vehicle movement e.g. reverse parking policy
- Keep first aid box
- Keep fire extinguisher

19. Storage/Warehouse

Contractor shall ensure an acceptable means for storing of material, chemical and fuel on sites. The requirements for storing of materials shall also include the following:

- Construction material shall be stored at the designated on site location.
- Written procedures on handling and disposal for all material must be made available.
- Good housekeeping must be practiced at all storage sites.
- Storage areas must be located away from vehicular traffic at areas.
- Storage floors and bins shall be labeled and constructed to safely support the loads that are to be imposed upon them with a posted appropriate maximum safe load limits provided.
- Storage facilitation must be provided with an approved lighting, well ventilated and constructed with a fire resistance or explosion proof facilities where appropriate for the chemicals or fuel stored.
- Welding, cutting or any other operations that create sparks must be prohibited inside a cabin or near the flammable/combustible material storage yards.
- Adequate number of fire extinguishers of appropriate type shall be made available at all storage areas and cabins.
- All personnel shall wear approved hard hats while in storage areas if stacking greater than 3 meters.
- Flammable and combustible liquids shall be stored separately preferably in storage buildings.
- Storage rooms shall be constructed to meet the required fire resistant rating for their use.

- Approved safety cans/cabinets shall be used to store and transfer flammable and combustible liquids, with the name of the material clearly stamped

- “No Smoking” signs shall be posted at storage areas involving flammable and combustible liquids

20. Driving/Vehicle Safety

Contractor personnel traveling to and from worksite shall use proper means of transport with assigned seat and seatbelt for every person. No back of pickup transportation is allowed. Contractor shall be responsible to provide safe access and egress to the worksite. Contractor shall set allowable speed limit and place suitable road signs at the worksite.

Contractor shall maintain and enhance the awareness of safe driving among its employees and its subcontractors. This includes PTP top 10 hazard of wearing seat belt, observing speed limit, maintaining good vehicle condition, driving defensively and possessing valid driving license.

The Contractor carrying out construction or maintenance operations on roads shall take due care and diligence to minimize the risk of injury to terminal users or damage to their property as a result of such operations by preparing Traffic Management Plan (TMP) for all work zones and submit to PTP HSE for approval and disseminate information on TMP to terminal user via traffic signs, banner, etc. (Preferably 1 week in advance).

21. Transportation

Transportation coming into PTP shall at first obtain a port pass upon successfully inducted. Vehicles recommended to move along the terminals area are pickups or MPV’s, mini bus or shuttle bus in such only approved vehicles will be granted passes at certain areas not including wharf terminals.

22. Lifting

All cranes supplied by Contractor shall be tested before going into service. All associated lifting equipment shall be inspected. A valid Perakuan Kelayakan Mesin Angkat (“PMA") certificate is required.

Contractor shall maintain cranes in a safe condition and make repair or replace unsafe crane for works. Should there be any doubt to the safety of the crane, Contractor may be required to perform load test at its own cost.

A colour coding shall be used to identify inspected lifting appliances. Contractor shall seek approval from PTP on any heavy lifting of 15 tonnes and above. Contractor is responsible for ensuring that only a competent and authorised worker shall operates any lifting device and that a signaler is designated to signal the operator as necessary to properly place and control the loads.

Prior to performing any lift, the operator shall determine the weight of the object being lifted and ensure that cables, lifting device and any slings, wire rope, chains etc. used in the lift are of a sufficient strength to support the weight of the load.

No worker shall be allowed under the load. Tag lines must be used to guide and control the load where excessive movement is possible.

A competent worker shall inspect all wire rope, chains, and slings prior to performing any lift. Record of inspection shall be kept for PTP's review and shall be produced upon request. During winch or tow, all personnel must be clear of the 'whip area' of cable under tension.

23. Heavy Machinery

All Contractor's heavy machineries on any worksite must have proper insurance and in safe operating condition. They must be operated by a competent, properly licensed operator. It shall be operated in a safe manner and at a speed suited to the terrain and weather condition.

All cranes, stringing trucks, heavy and tracked equipment and machinery, welding rigs and all vehicles except passenger vehicles must be fitted with reverse alarms.

Any vehicle with restricted vision shall not operate in the vicinity of workers, except under the direction of a designated worker who is in a position to see that the way is clear and safe.

24. Working at Height

When working at height above 2 meters, the Contractor shall put appropriate control measures or methods to reduce or maintain the risk of falling from heights. The control measures shall be carefully assessed and implemented to ensure its effectiveness. The approach to control measures should be attempted from the top of the hierarchy onwards. The hierarchy of controls shall be as followings:

- Hazard elimination - Preferred solution is to eliminate exposure to fall hazard.

- Fall restraint system - Physical barriers, like guardrails around unprotected edges and covers over holes.

- Passive fall protection - Use personal protective equipment to restrict the worker's range of movement so they cannot fall. Contractor shall provide to the workers with fall protection devices such as full harness with double lanyards, etc. Personnel using fall protection shall be instructed on its use with a proper fall protection training.

- Fall arrest system - Design for situation where exposure to a fall is not preventable. A fall is arrested within acceptable force and clearance. When working at height more than 7.5 meters, Contractor shall provide suitable safety nets, which extends to 2.5 meters beyond the edge of work level. The nets shall be sufficiently anchored using steel hooks or shackle. The net shall be inspected daily.

- Administrative controls - Least preferred solution is the work practices or procedure that increase a worker's awareness of a fall hazard. A working at height rescue plan is mandatory.

25. Air hose

Air hose should not be used to clean any part of the body or clothing or used to blow off dirt on the floor. It shall not also be laid on ground and shall be winded properly or stored at proper place after Works/Services has finished.

26. Job Safety Analysis (JSA)

Prior to performance of Works/Services, Contractor shall implement JSA as a safety precaution to eliminate or guard against hazards on a specified job. The JSA methodology shall include the following:

- Study the job and develop basic job steps
- Identify the hazards on each job step
- Identify the safety precautions to be taken against each job step
- Record the JSA and inform all workers of the hazards and precautions to be taken.

This JSA shall be established for all activities within the Contract. It shall be revised in case of changes due to accident, new compliance obligations, new process and changes related to workers, material and technology. Contractor shall follow the JSA template as published in the PTP's website (www.ptp.com.my/services/hse) when developing the JSA.

PTP has the right not approve the PTW should no JSA is established and attached with the hard PTW document on site during the Works/Services.

27. Safety Inspection/Audits

Prior to commencement of works, Contractor is required to inspect the worksite and equipment involved to ensure that Works/Services will be performed under safe conditions. In addition, Contractor shall maintain and perform continuous safety inspection throughout the works and shall promptly implement all recommendations made pursuant to the said inspection. PTP shall have the right to conduct its own safety audit/inspection at the worksite. Contractor shall comply with all recommendations arising from such audit/Inspection.

28. Safety Induction "PTP Client – Introduction"

Contractor shall identify its employees who will be required to attend PTP's safety induction training conducted by PTP HSE Team or any PTP appointed personnel .This training shall be applicable to all contractor's and its subcontractor's personnel which requires access to the terminal areas. Each personnel who has attended the safety induction training and successfully passed the assessment will be issued with a port pass subject to having met all other port pass requirements.

28.1. Contractor Own Induction Program

Contractor shall implement a safety induction for the site. Contractor shall identify its employees who will be required to attend the safety induction program. The induction briefing shall be applicable to all Contractor and its subcontractor's employees as well as to any visitors to the site. Briefing shall be done at site prior to the commencing of the construction activities.

Each person who has attended and completed the safety induction program shall be issued with a sticker to indicate that he has completed the safety induction course. The sticker shall be displayed on the safety hat and worn at site.

29. Toolbox HSE Meeting

Contractor shall ensure that his appointed works supervisor hold 'tool box' safety meeting for about 5-10 minutes daily and/or prior to each shift. Specific topics shall include hazards relevant to current work, review of accidents and near misses and deficiencies and any new equipment or machinery. Contractor shall maintain records of attendance and submit to PTP as and when required.

30. HSE Meetings

Contractor shall form a Safety Committee at work site and shall hold regular meetings (minimum monthly) to create and maintain an active interest in safety. The meeting shall be attended by Contractor's management and workers representatives and chaired by Contractor's site project management. A copy of the minutes of every meeting of a safety and health committee shall be furnished to every member of the committee and to PTP within two weeks after the meeting has taken place. PTP representative may upon invitation from Contractor joining this forum and monitor the implementation and compliance as required by legal.

31. Occupational Health

Contractor shall ensure that all its employees and subcontractor employees engaged in the work are medically fit and healthy. Any medical diseases or disabilities which Contractor may consider will not adversely influence the employee's ability to perform his role in the work, should be reported to PTP prior to start of the work.

Contractor shall, at no cost to PTP, be responsible for the medical welfare of its own and subcontractor employees and shall take care of arrangements for medical attendance, treatment or hospitalization if and when necessary and will arrange suitable insurance coverage for such contingencies.

In case of emergencies, PTP may provide for necessary emergency arrangement, the cost of which shall be reimbursed to PTP by Contractor.

Contractor shall at its own expense have a fully equipped first aid station on site to treat minor injuries. This station shall be manned during all working hours. Contractor shall ensure that its personnel and subcontractor's personnel shall maintain a high standard of hygiene in connection with the performance of the work.

The Contractor shall provide, where necessary, sufficient hygienic drinking fluids and toilet facilities to meet health regulations and all other legislated requirements.

32. Drugs and Alcohol

The use, sale, dispensing or possession of drugs, narcotics and alcoholic beverages is prohibited on the location and at any place at all times where the Works/Services is performed.

Contractor shall ensure that its personnel do not at any time, during the performance of the work, partake, brought onto the worksite, or be under the influence of any alcoholic liquor, drug or other intoxicating substance. This prohibition also covers all legal or prescription drug which may impair an employee's ability to perform his job safely. Employees who are caught using or in possession of drugs, on the job site shall be discharged. PTP reserves the right to randomly require contractor employee, to undergo drug test at any time. Drugs test may be used in the event of accident investigation. Contractor undertakes that each and every person engaged by

it or on its behalf to perform any element of the work (including sub-contractor) shall be advised of the local laws relating to the importation and/ or possession of drugs. PTP recommends the Contractor or its Subcontractor to establish its own Drug & Alcohol Policy, where applicable.

33. Environmental Management

Contractor shall outline and implement an environmental quality management plan that details the practices, procedures and counter-measures for effective management of environmental impact, as required by both Malaysian Department of Environmental ("DOE") and PTP's requirements.

Contractor will develop a waste management plan as required by DOE and PTP. The plan will inventorise all wastes and states their method of disposal. A draft of the plan will be available before the commencement of any Works/Services. The plan will be regularly updated as conditions change. Contractor shall handle, sort and dispose all wastes in conformance with the plan.

34. Security

Contractor's appointed security personnel shall be equipped with communication equipment and shall able to contact PTP's port police and other emergency units as required. Contractor may install CCTV cameras at their work site to monitor stores and equipment's at site. This will also ensure workers monitoring of safety at workplace. The CCTV installation will be at Contractor's own cost.

Contractor shall provide shelter, facilities and amenities to enable such functions or duties to be performed properly and to the satisfaction of safety officer.

35. Emergency Response Preparedness

Contractor, at its own cost, shall ensure adequate provision for emergency response at site, which as a minimum includes the following;

- fire fighting
- fire prevention
- first aid medical facilities

Contractor's personnel shall be trained and competent in the use of firefighting equipment effectively. Contractor shall also ensure its first aiders are trained and competent to render such services effectively. Contractor shall call in PTP's emergency assistance where and when required based on the severity of the event.

36. Contractor Training Records

Contractor shall provide adequate training to all its personnel to ensure that they have sufficient knowledge and skill to undertake assigned tasks. Contractor's training records shall be maintained and controlled.

37. Safety Performance Target

In line with PTP's objective to promote safety consciousness and safe working practices among the working employees, Contractor shall implement and establish a safety management award program to recognize the achievement and milestone for safe working performance for its employees.

38. Contractor HSE Performance Reports

Contractor shall compile and maintain HSE performance records pertaining to its works with PTP. These records shall be updated and submitted to PTP representative monthly or as and when required. The records shall be presented in any format that the Contractor may think suitable.

39. Incident Notifications and Investigation

Contractor shall develop an accident/incident reporting system, which shall be compatible with PTP's reporting system. Any occurrence of hazardous incident involving in PTP's work site, Contractor's or any third party personnel, plant or equipment, shall be immediately reported to PTP, irrespective of whether there is any injury to personnel or damage to plant or equipment.

All incidents that result in or have the potential to cause serious injuries or property damage must be suitably investigated by Contractor and PTP. Contractor shall keep a copy of the report at site. Contractor is required to investigate and report major accident to the Malaysian Department of Occupational Safety and Health ("DOSH") in accordance with the regulatory requirements. The investigation and report shall not preclude any similar investigations and reports required by the governmental authority in accordance with any relevant laws and regulations and maybe handled concurrently with them.

Upon completion of the work under the contract and/or on an annual basis, whichever is more frequent, Contractor shall prepare a summary report of its HSE performance together with an accident statistics JKKP 8 submission before 31st January of the following year.

40. Statistics Board

In line with PTP's objective to promote safety consciousness and safe working practices among the working employees, the Contractor is required to install a Loss Production Scoreboard to highlight achievement/milestone for safe working hours of employees.

The Contractor shall install the above at each site office. The Loss Production Scoreboard shall be of acceptable material and shall contain the following information as a minimum (in English and Bahasa Malaysia):

Name of company _____
Date Start of Work. Month _____ Day _____ Year _____
Safety Target (Man-hours, Year) _____
Best Record Achieved (Man-hours, Year) _____
Current Man-hours Achieved (Man-hours, Year) _____
Date of Last Loss Time Accident (Man-hours, Year) _____
Total Number of Loss Time Accidents _____

Attachment 1 - PPE Standards & Technical Specifications

1.	Safety Glasses	Frame: Wide vision, clear plastic eye shield with side protection which can be worn over spectacles Lenses: Clear polycarbonate affording BS2092 Grade 2 impact protection Marking: all eye shields shall be appropriately and distinctly stamped with the authentic trademarks of the Manufacturer's monogram and standards. Accessories: Neck strap only Certificate: Manufacture's Certificate of compliance to standards. ANSI Z 87.1-1979 ANSI ZZ 87.1-1979 AS 1337-1981 BS 2092, BS1542, BS679, DIN 4646/58211
2.	Safety shoes	Hazard control: Crush from heavy objects (steel toe), Cuts and Puncture, Slip (oil resistant sole), Trip & Fall and Electrocution. ANSI Z 41.1-1967 AS 2210 EN 345
3.	Chemical use	Hazard control: Crush from heavy objects(steel toe), Slip(oil resistant sole), Trip & Fall and Chemical contact BS 1870/3 , DIN 4843
4.	Hand Protection Cotton Glove Leather Cotton Glove PVC Glove	All types of gloves, cotton, leather or PVC conforming to BS 1651 are acceptable. Knitted Cuffs, palm, thumb and forefinger with anti-slip, PVC Dots. Overall length 250mm Cotton drill knitted cuffs with chrome leather palm. Overall length 250mm PVC over knit cotton interlocks standard weight and smooth surface. Length 400 mm.
5.	Head Protection	Peak type, Chemical resistance complete with hot press branding adjustable headband, Clip and Elastic chin straps Material: ABS (Acrylic Butadiene Styrene Added with Nitrile) ANSI Z 89.2-71, ANSI Z 89.1-86 class B, AS 1808-81, BS 5240, DIN 4840
6.	Eye/face protection Chemical splash goggle Face shield Welding goggles	Goggles with hooded ventilation - 2 (face shield (9) in combination with safety glasses - 4, 5) ANSI Z87.1-68 Goggles or Safety glasses - 1,3, 4, 5 (for severe exposure face shield - 9) ANSI Z 89.1 Welding goggles with tinted lenses 6, 7, 8 (for severe exposure face shield - 9) ANSI Z 87.1-68, ANSI Z 87.1-79

7.	Safety harness	The harnesses shall be constructed of shock-absorbing material e.g. Webbing manufactured from synthetic fibre. Similar, safety lanyards shall also be of synthetic fibres e.g. Polyamide, nylon or polyester. To reduce possible injuries to the users from decelerating forces, safety harnesses, the leg and shoulder load-carrying straps at least 38mm (1.5 inches) wide. Each safety harness must be provided with one or more D-rings suitably positioned for attachment to two safety lanyards. They shall withstand a 5000 lb (2300 kg) force without breaking or cracking. Buckles should be of a universal-friction type. Harnesses with load-bearing single-insertion type buckles are not permitted. Snap hooks for safety lanyards shall be of the self-closing type and shall be designed so that disengagement of each of the latches requires a deliberate action. All harnesses and safety lanyards shall carry test certificates or certificates of compliance to the standards to which they are manufactured. Two types of safety harnesses are recommended and they are classified according to their intended use:- Chest Harness - Class II
8.	Personnel floatation devices (PFD's) Life Jackets	It is intended as an aid to turn an unconscious person in the water from a face down position to a vertical and slightly backward position which greatly increases the chance of Survival. Type 1 PFD USGC/Type V PFD USGC
9.	Breathing apparatus	BS 4667, NIOSH
10.	Self-contain breathing apparatus	NIOSH, ANSI, AS, BS
11.	Other respirator for protection from dust, vapour ,etc.	BS 2091, NISOH, EN 149

Attachment 2: HSE Policy

A Member of MMC Group

HEALTH, SAFETY, AND ENVIRONMENT POLICY

It is the commitment of the Port of Tanjung Pelepas to conduct all its activities to a policy of zero harm to people and the environment.

We will conduct our activities in a manner that protects the health and safety of our employees and that the actions of the company and its employees do not harm the health and safety of others.

Our Policy Commitment:

- Continual improvement of HSE performance
- Compliance with HSE related regulations and legislation
- Prevention of injuries and illnesses
- Minimizing any negative impact on environment
- Providing a framework for setting and reviewing HSE objectives & targets
- Providing a healthy and safe work facility & environment
- Protection of employees, labour, contractors, customers and visitors

The Policy will be implemented by:

- Zero tolerance of unsafe work behavior
- Visible and active demonstration of leadership by the entire management team
- Promoting HSE culture and awareness throughout the entire organization
- Providing required resources and support to achieve the HSE objectives and targets
- Providing adequate and relevant HSE training to all staff at all levels
- Reporting and investigating of all accidents and incidents
- Identifying and mitigating all HSE hazards and managing risk to acceptable levels
- Communicating progress on HSE performance to all stakeholders
- Adopting best practices and industry standards to improve the HSE performance

The management will visibly and consistently uphold the principles and requirements of this policy and regularly review the HSE performance.

Each person is responsible and accountable for their own safety as well as personnel under his/her management. Through active participation and commitment of all our staff, we will strive to meet and exceed the requirements of this Policy.

Marco Neelsen
Chief Executive Officer
Port of Tanjung Pelepas
December 2016

Attachment 3: Security Policy

A Member of MMC Group

SECURITY POLICY

The Port of Tanjung Pelepas is committed to providing a secure workplace ensuring that our business activities are conducted in a manner that complies with local and international law, regulations, including requirements of the ISPS code.

The policy has been established on the basis that concern for the security of our employees, customers and assets are essential to the successful conduct and future growth of our business.

Policy objectives:

- Continual improvement of security performance and processes through regular audits
- Identification and evaluation of all security issues or aspects and establishment of controls to manage and reduce all risks to an acceptable level
- Compliance with all applied International and National governmental security legislative requirements
- Adoption of other security initiatives as deemed operationally and commercially necessary
- Safeguarding company employees, commercial and operational assets and our client's interests
- Intolerance of the conditions and behaviors that contribute to breaches of security
- Promote security awareness amongst all employees
- Communicate relevant content of the policy, where applicable to third party organizations, visitors and contractors
- Recording and communicating security performance throughout the organization

The Management will visibly uphold the principles of this policy and integrate them throughout the company and will regularly review security management performance.

Every employee whose work may create a significant security impact will be trained and held accountable for complying with the policy and related procedures, practices, instructions and rules.

Through the active participation and commitment of all our staff, we will strive to meet and exceed the requirements of this policy and demonstrate our commitment to security excellence.

Marco Neelsen
Chief Executive Officer
Port of Tanjung Pelepas
December 2016