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WORKER OCCUPATIONAL HEALTH AND SAFETY MANAGEMENT PLAN

3	24/08/2016	Updated based on changes to project configuration	MFC		
2	22/04/2015	Response LSP's Comments	ERM	See attachment of reviewer's signature	
1	26/02/2015	Response LSP's Comments	ERM	See attachment of reviewer's signature	
0	14/01/2015	Issue For Review	ERM	See attachment of reviewer's signature	
REV.	DATE (dd/mm/yyyy)	DESCRIPTION	PREPARED	CHECKED	APPROVED

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ATTACHMENT OF REVIEWER'S SIGNATURE


No	Name	Position	Signature
1	Booneuame Noiaim	Deputy General Director	
2	Pholavit Thiebpattama	Overall Project Director	
3	Le Duy Dong	HSE Manager	
4	Kitti Phadungchiwit	Manager of Package A	
5	Somsak Sombatboriboon	Manager of Package BCD	
6	Nisit Jintawong	Manager of Package F & H	
7	Amnat Pheerawat	Manager of Package G	
8	Jirapol Kosolwadhana	HR Director	
7	Pham Hung Thinh	CSR Manager	
10	Pham Hong Phuong	Overall Project Coordinator	

REVISION LOG

Rev.	Date (dd/mm/yyyy)	Revised Detail			
		Item	Page	Article	Description
0	14/01/2015	all	all	all	Issue For Review
1	26/02/2015	all	all	all	Response LSP's Comments
2	22/04/2015	all	all	all	Response LSP's Comments
3	24/08/2016				Updated to reflect project changes


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ACRONYMS


ASP	Air Separation Plant
BOC	Balance of Complex
CTU	Central Utility Plant
EHS	Environmental, Health and Safety
EPC	Engineering, Procurement and Construction
ESIA	Environmental and Social Impact Assessment
HDPE	High Density Polyethylene
HSE	Health, Safety and Environment
HSSE	Health, Safety, Security and Environment
IFC	International Finance Corporation
LLDPE	Linear Low Density Polyethylene
LSP	Long Son Petrochemicals
MoLISA	Ministry of Labour, Invalids and Social Affairs
MP	Management Plan
PP	Polypropylene
PS	Performance Standard
QCVN	National Technical Regulation
TCVN	Vietnamese Standards

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DISCLAIMER

It is upon the Contractor to solicit, acquire and comply with all information, laws, rules, regulations, and Applicable Standards which is/are necessary and/or required for and applicable to the Contractor's performances of the works hereunder.

The Contractor hereby agrees and acknowledges that the Employer makes no representation or warranty, express or implied, regarding the accuracy or completeness of any or all information, laws, rules, regulations, and Applicable Standards which is/are necessary and/or required for and applicable to the Contractor's performances of the works hereunder. THE EMPLOYER HEREBY EXPRESSLY DISCLAIMS ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR ALL RESPECTS, and the Contractor agrees that neither the Employer nor any of its affiliate(s), director(s), officer(s), employee(s), consultant(s), professional advisor(s), and duly authorised representative(s) shall have any liability to the Contractor or any of its affiliate(s), director(s), officer(s), employee(s), consultant(s), professional advisor(s), and duly authorised representative(s) in any way relating to those information, laws, rules, regulations, and Applicable Standards which is/are necessary and/or required for and applicable to the Contractor's performances of the works hereunder or the Contractor's or its affiliate(s)', director(s)', officer(s)', employee(s)', consultant(s)', professional advisor(s)', and duly authorised representative(s)' reliance thereupon and/or use thereof.

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1 INTRODUCTION


1.1 PURPOSE AND SCOPE

The purpose of this management plan is to set out the policy, procedures and actions that will be used so that all work conducted as part of the construction phase of the LSP project is carried out in ways that protect the health and safety of workers. The objectives should clearly strive to have world class project targets based on OSHA Standards of zero fatalities and zero lost time from injury throughout the construction period. The objectives also strive for an acceptable total recordable injury rate of 0.24 per 200,000 man-hours¹.

This document sets out a framework for the EPC's OHS management plans, as well as the assessment, training, monitoring and oversight procedures that will be used by LSP. The EPC's OHS management actions are also expected to address the residual worker occupational health and safety impacts that they have control or partial control over, as identified in the project's Environmental and Social Impact Assessment (ESIA) and the Long Son Petrochemical's (LSP) Construction Health, Safety and Environment Management Plan (ref: LSP-1S01-005).

This plan includes an outline covering all actions carried out by EPCs or their subcontractors in the work area (at site), at temporary facilities, in laydown areas and at worker camps in all phases of the project construction. The plan also applies to pre-commissioning and commissioning activities if a separate OHS management plan covering these phases has not been developed prior. Table 4.1 in Section 4 outlines the areas which EPC contractors are expected to develop into detailed plans, while Section 3 focuses on LSP's OHS monitoring and oversight roles. Instructions in red provide guidance to Contractors for developing OHS Management Plans that are aligned with the LSP OHSMP.

It should be noted the information in this Worker Occupational Health and Safety MP is based on relevant regulations, guidelines and standards at the time of writing of the ESIA updated in August 2016. Should the contractors' activities change or new regulations, guidelines or standards apply the contractor will review, amend and resubmit this Worker Occupational Health and Safety MP to LSP.

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1.2 **APPLICABILITY**

This WTMP applies to the construction phase. Updates will be made to the document prior to the commencement of operations and if substantive changes to other relevant management plans require respective changes herein. The requirements of this plan apply to EPC Contractors, Subcontractors in any work at the Project site, including: visitors, those delivering goods; the servicing of plant and equipment by suppliers; and employees working at the accommodation camps, insofar as all personnel have an influence and responsibility over the HSSE performance of the Project.

1.3 **PROJECT OVERVIEW**

The Long Son Petrochemicals Complex Project is located in Hamlet 2 and Rach Gia Hamlet, Long Son Commune, Vung Tau City, Ba Ria – Vung Tau Province, Vietnam. The Complex is spread over 464 ha, including area for its future expansion.

The Project will be comprised of two (2) main components:


1) **The Petrochemical Plant**, which consists of the following plants and units:

- Main Production Plants
 - Olefins Plant
 - High Density Polyethylene (HDPE) Plant
 - Linear Low Density Polyethylene (LLDPE) Plant
 - Polypropylene (PP) Plant
- Supporting Units
 - Central Utility Plant (CTU) (contains a Steam Generation Unit and Water Plant)
 - Tank Farm
 - Common Infrastructure

2) **The Seaport**, which consists of the following components:

- Hydrocarbon Jetty - to transfer feedstock and product for the Petrochemical Plant
- Construction Jetty - to import construction materials, including heavy lift modules.

The total land area that will be acquired for the Project is 464 ha, consisting of 398 ha for the Complex, and 66 ha for the specific port. In addition, there is a total water surface area of 194 ha that will be acquired for the seaport.

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1.4


SOURCES OF WORKER OCCUPATIONAL HEALTH AND SAFETY IMPACTS

Potential sources of worker occupational health and safety impacts and risks include:

- Excessive staff working hours;
- Inappropriate work clothing / PPE;
- Insufficient site notices concerning health and safety;
- Construction methods which could result in fires;
- Use of scaffolding;
- Tools and portable powered equipment;
- Mechanical and heavy equipment;
- Electrical work;
- Hazardous materials;
- Excavation work;
- Working at height;
- Working over water;
- Working in confined spaces;
- Lifting and rigging operations;
- Welding and cutting;
- Radiography;
- Inappropriate housekeeping;
- Occupational noise;
- Extreme weather;
- Mobile phone use;
- Inappropriate first aid;
- Inappropriate medical facilities / staff;
- Lavatories and washing facilities;
- Drinking water; and

The construction schedule for the potential sources of worker occupational health and safety impacts is shown in Annex A.


[Note to contractor: Contractor to insert a Gantt chart of the part of the construction schedule for which they are responsible in Microsoft Project Office format in Annex A. The Gantt chart will include a breakdown of the tasks associated with potential sources of worker occupational health and safety impacts].

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1.5 APPLICABLE STANDARDS

Relevant worker occupational health and safety legislation and standards include (shown here with recent updates):


Legislation, Decrees, Circulars & Standards	Issued by	Issued date	Name/ Description
Labor Code 2012	National Assembly	18-Jun-2012	Framework law on health and safety
Decision No. 3733/2002/QĐ-BYT	Ministry of Health	10-Oct- 2002	Promulgating 21 labor hygiene standards, 5 principles and 7 labor hygiene measurements (refer to Annex B for relevant occupational noise standard);
Decree No. 45/2013/NĐ-CP	Government	10-May-2013	Providing the articles of the labor code on hours of work, hours of rest, occupational safety and occupational hygiene
Circular No. 07/2016/TT-BLĐTBXH	MoLISA	16-May-2016	Regulation on occupational health and safety in producing and trading facilities
Circular No. 04/2014/TT-BLĐTBXH	MoLISA	12-Feb-2014	Guiding the implementation of regulations on personal protective equipment;
QCVN 18:2014/BXD	Ministry of Construction	5-Sep-2014	National technical regulation on Safety in Construction;
QCVN 02:2008/BCT	MOIT	30-Dec-2008	National Technical Regulation on Safety in the Storage, Transportation, Use and Disposal of Industrial Explosive Material;
TCVN 6407:1998 – ISO 3873:1997	Ministry of Science, Technology and	1998	Industrial Safety Helmets;

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	Environment		
TCVN 7653:2007	Ministry of Science and Technology	2007	Personal Protective Equipment – Protective Footwear;
TCVN 1841-76	Committee on State Science and Technique	4-Dec-1976	Job Safety Gloves;
TCVN 3581-81	Committee on State Science and Technique	1981	Eye protectors - General technical requirements and methods of testing;
QCVN 01:2009/BYT	Ministry of Health	17-Sep-2009	National Technical Regulation on Drinking Water Quality;
IFC General EHS Guidelines		2007	Occupational Health and Safety
IFC General EHS Guidelines		2007	Construction and Decommissioning
IFC Performance Standard (PS) 2		2012	Labor and Working Conditions

This plan should be used in conjunction with the following LSP management plans:

- The Workers Accommodation Management Plan (LSP- LS01-0004);
- The Workers Training Plan (LSP- LS01-0003); and
- The Community Health and Safety Action Plan (LSP- LS03-0002 Annex F).

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2 ROLES AND RESPONSIBILITIES

2.1 INTRODUCTION

Having an appropriate organisational structure in place with all people having defined roles and responsibilities is essential to ensuring the overall success of this Worker Occupational Health and Safety MP. This section provides details of LSP's and the contractor's organisational structure with regards to onsite delivery of the LSP project, and the various roles and responsibilities of those people in relation to delivering the clients EHS expectations, including meeting the requirements of the Construction Health, Safety and Environment Management Plan.

2.2 LSP'S PROJECT DIRECTOR

2.3 LSP'S SITE MANAGER

The LSP site manager will demonstrate through leadership and example, the importance given to OHS management at the Project and will use their management role to reinforce and share this position with members of the senior management teams of the EPCs and major contractors.


2.3.1 LSP's Project Manager

The role of the EPC Interface Lead is to lead the management of all HSSE issues with regards to the workers accommodation site. The LSP Project Manager's responsibilities include:


- Ensuring that the requirements of the OHSMP are applied by all LSP's staff, EPC Contractors and Subcontractors;
- Reviewing and approving the EPC OHS Management Plans;
- Reviewing the HSSE performance reports and monitoring reports from the EPC Contractors with regards to compliance to contract commitments, the national regulations and standards;
- Leading HSSE audits and inspections, committees, and incident investigations of EPC Contractors and Subcontractor; and
- Reviewing the EPC Contractors' HSSE monthly and annually summary and reporting to LSP's Director, Government Authorities and Lender.

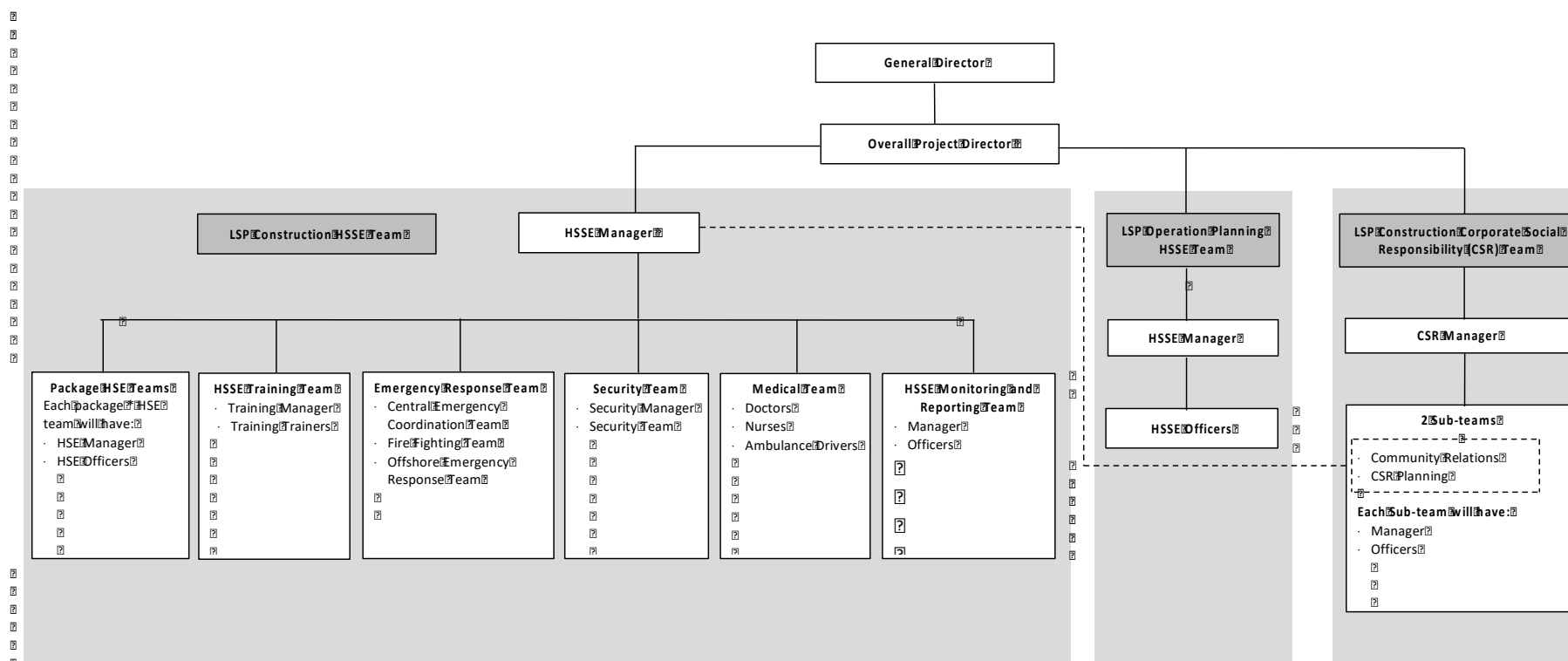
2.4 LSP CONSTRUCTION HSSE TEAM

LSP's health, safety, security and environmental (HSSE) team will lead the management of HSSE issues concerned with worker occupational health and safety. The LSP organisational chart to implement the requirements of this Worker

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Occupational Health and Safety MP is shown in the figure below. The specific roles and responsibilities are shown in Chapter 5 of the LSP Construction Health, Safety and Environment Management Plan (ref: LSP-1S01-005).

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Note:

- Package A: Olefins Plant, Tank farm, Complex interconnecting pipelines/pipe racks, Land development in tank farm area, Topside facilities in hydrocarbon jetties, Complex wastewater treatment unit and HP flare/LP flare system
- Package B/C/D: Polyolefins Plant (HDPE/PP/LLDPE)
- Package E: Sea Port (excluding Topside in the Hydrocarbon jetties and construction jetty which are under the scope of the Contractor Package A and Package B respectively)
- Package G: Central utility Plant (including steam generation unit and water plant)
- Package H: Common infrastructure in the complex (including Administration building, Laboratory building, Canteen building, Emergency Center, First Aid Center and Polyolefins Product warehouse)
- Package I: Complex road including drainage, street lighting, CCTV, green area, Topside for construction jetty, Complex truck scale, and blown film system
- Package L: Land development work in the whole complex except tank farm area

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2.5 EPC HSSE REPRESENTATIVE

The EPC HSSE Representative is responsible for the development and implementation of the EPC's own OHSMP, which must be in accordance with LSP's OHSMP (this document) and any recommendations provided by the Site Manager and they are expected to liaise with the LSP EPC Interface Lead. The Contractor's OHSMP must reference specific mitigation measures and monitoring programs, and the hazard assessments for the activities to be undertaken.

The responsibilities of each EPC HSSE Representative include the following:

- Reviewing and approving the Subcontractors' OHSMPs;
- Ensuring compliance with the welfare, safety and health requirements identified in the EPC Contractors' documents by inspection of initial construction of the accommodation, through its operation and removal from the Project Site, through ongoing monitoring and auditing and the review of reports from Subcontractor;
- Submission of all inspection reports to LSP's EPC Interface Lead including those from Subcontractors;
- Coordinating the routine internal audits of facilities, as specified in these documents or when requested by LSP;
- Reporting to LSP's HSSE Team on a monthly and annual basis with regards to providing a summary of the internal audits specified in this OHSMP, including Subcontractor report's, conditions of worker accommodation, any issues that arise from those living in the provided housing;
- Ensuring that all routine internal audits are undertaken in accordance with this document and carrying out ongoing oversight and reviews of all work to ensure that it is in compliance with these requirements;
- Ensuring, through a monitoring and inspection programme, that any Subcontractor's OHSMP is fully complied with; and
- Ensuring the prompt investigation, recording and reporting of any actions, incidents, injuries, accidents or near-miss incidents that may result from worker's employment, transportation or accommodation. In addition ensure prompt investigation, recording and reporting of any situation that may impact worker welfare, including the identification of corrective actions and their timely close out.

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2.6 CONTRACTORS HSSE TEAM

The contractors HSSE team has established this Worker Occupational Health and Safety MP in accordance with the applicable standards. The contractors HSSE team will manage their contractors and suppliers in accordance with this Worker Occupational Health and Safety MP and liaise with the appropriate personnel within LSP's HSSE to ensure compliance with the overall aims of LSP's Construction Health, Safety and Environment Management Plan (ref: LSP-1S01-005). They will use an appropriate management structure with discipline supervisors responsible for oversight of specific high-risk activities (e.g., scaffolding, dredging, etc.).

The contractors' onsite organisational chart to implement the requirements of this Worker Occupational Health and Safety MP is shown in the figure below.

[Note to contractor: Contractor to insert organisational chart for onsite team].

2.7 DESCRIPTION OF ROLES AND RESPONSIBILITIES

The contractor has committed to providing the necessary human resources to ensure that the organisational structure noted above can work to implement this Worker Occupational Health and Safety MP and achieve compliance with all relevant standards. A description of the key roles and their responsibilities are provided in the *Table 2.1*, including the primary communication channel between LSP and contractor HSE teams. Employee contact details for each role associated with this Worker Occupational Health and Safety MP are provided in Annex C.



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Table 2.1 *EHS Roles and Responsibilities within Contractor's Project Team*

Role	Responsibilities
General Manager (Contractor)	
Senior Site Engineer (Contractor)	
Site HSSE Manager (Contractor)	
Site Construction Manager (Contractor)	
Emergency Response Co-ordinator (Contractor)	
<i>Discipline Supervisors (Contractor) – List by specific disciplines</i>	

[Note to Contractor: Insert a description of the responsibilities of each role, with regards to the management of EHS and Worker Occupational Health and Safety. Delete roles that are not appropriate. Include additional roles where required.]

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3 OHS MANAGEMENT ACTIONS

LSP is responsible for providing leadership in OHS management for the Project including oversight, correction and approval of all EPC OHS Management Plans, reviewing reports, monitoring compliance with the EPC OHSMPs, including oversight of any incident reports and follow-up actions.

3.1 GENERAL HEALTH AND SAFETY REQUIREMENTS

The LSP OHS Management team is responsible for management plan review, report oversight and monitoring. They will ensure that plans and implementation include commitments to, reporting of conformance with and oversight of all general OHS rules (as listed in Table 4.1 (Sections 1-3, 6.3, 19 and 22), including but not limited to safe driving principals; site notices that will be posted; housekeeping requirements; mobile phone restrictions; working hours; OHS for office workers; and appropriate clothing, etc.

3.2 PERSONAL PROTECTIVE EQUIPMENT (PPE)


The LSP OHS Management team is responsible for approval of plans for, review of reports on and monitoring and oversight of the quality, appropriateness and use of PPE as described in Table 4.1 Section 4. This includes requirements for helmets, boots, gloves, eye protection, hearing, respiratory protection, overalls, high vis clothing, safety harness and lifelines, and special requirements for marine works, training for marine works (lighting on jetties when marine works are occurring 24/7). Spot monitoring and incentives should encourage checking of toolboxes before the start of work.

3.3 OHS TRAINING

The LSP OHS Management Team will be responsible for reviewing and approving the EPC Worker Training Management Plans and for reviewing reports on, monitoring and overseeing the training provided so that it is in full compliance with the LSP Worker Training Management Plan (LSP-OS01-0004) and this plan: the LSP OHS Management Plan.

3.4 WORK HAZARD ASSESSMENT, PERMIT TO WORK AND SPECIFIC HEALTH AND SAFETY REQUIREMENTS

The LSP OHS Management team is responsible for oversight of the specific requirements of EPC management plans as they relate to the specific work

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hazards that could be encountered by their workers and subcontractors' workers. This includes oversight of the completeness and appropriateness of the Job Safety Analysis carried out by each EPC and ensuring that appropriate plans, training, and safety controls are in place for each hazard identified. Safety controls will include standard operating procedures, PPE, monitoring and oversight are provided for all relevant work hazards requiring a Permit to Work (as discussed in Table 4.1 (Section 5) for all activities requiring such a Permit (as outlined in Table 4.1 (Section 7 to 18)).


3.5 MEDICAL AND HYGIENE REQUIREMENTS

The LSP OHS Management team will be responsible for approval of, reviewing reports on, monitoring and oversight of all medical and hygiene facilities and procedures on site and in worker accommodation as outlined in Table 4.1 (Sections 23 through 26).

3.6 PRACTICAL SAFETY PROCEDURES

The LSP OHS Management team is also responsible for oversight of the following practical safety measures as outlined in Table 4.1

1. Fire - Fire safety special requirements are outlined in Table 4.1 Section 6.
2. Extreme weather – Extreme weather safety requirements are outlined in Table 4.1 Section 21.
3. Occupational noise – The requirements for managing high occupational noise environments are outlined in Table 4.1 Section 20.

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4

SPECIFIC MITIGATION / MANAGEMENT PROCEDURES

Each EPC (and each subcontractor) is responsible for developing an acceptable OHS plan to mitigate and manage worker occupational health and safety impacts during construction. Each management plan will include a statement that the EPC or subcontractor is committed to implementing the identified mitigation / management procedures in order to ensure compliance with the applicable worker occupational health and safety standards.

The mitigation / management measures relevant to the EPC or subcontractor's onsite activities are outlined in Table 4.1, which should be detailed to a level commensurate with the worker health and safety hazards inherent in the activities in the Contractor's scope of work and in all supporting activities (e.g., laydown activities and worker's accommodation activities) required.

The initial identification of the mitigation / management procedures required for Project construction were outlined in the ESIA as being appropriate for the environmental and health and safety impacts and risks inherent in the anticipated construction activities. Detailed identification of occupational health and safety impacts and risks arising from the contractors activities, will involve a detailed Job Safety Analysis (see Table 4.1 Section 0) and the contractor will ensure that all measures outlined in the Table in this OHS management plan and detailed in each individual EPC or Subcontractor OHS management plan are implemented accordingly.

Note to contractor: Based on the detailed work hazard assessment, delete mitigation / management measures which are not applicable or are fully outside of your control. Detail the specific management measures required and specify responsibilities for training,, implementation, internal monitoring and reporting for each mitigation / management measure.




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Table 4.1 Mitigation / Management Procedures


Aspect, Potential Impact / Issue	Mitigation Reference	Mitigation and / or Management Procedures	Contractors Responsibility	Related Plans
Job safety assessment and safety controls	0.1	Job Safety Analysis (JSA). All EPCs will carry out a comprehensive JSA to identify all activities within their SoW and within the activities required to support their SoW (e.g., worker transportation, accommodation, lay down area management) that involves potential occupational health, safety or hygiene risks to workers. For each activity identified the extent of control of the EPC over each activity and where the EPC has oversight responsibility will clearly identify the Contractor or Subcontractor responsible for managing the OHS hazard.		
	0.2	Safety controls. For each work hazard identified the OHS management plan will identify the set of safety controls required to reduce the OHS impacts and risks on workers to an acceptable level. Safety controls will include but will not be limited to training requirements, permit requirements for high risk activities, PPE specifications, SOPs for safe management of hazards, monitoring and oversight requirements, clear definitions of responsibilities and reporting requirements, indicators and frequencies.		
	0.3	Subcontractor safety controls: For activities that are the direct responsibility of Subcontractors, the EPC will review the Subcontractor risk assessment for hazardous work and will review		

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Working Hours		the safety controls to be implemented by the Subcontractor and will correct and approve plans so that they provide a comprehensive identification of the work hazards as well as a series of safety controls capable of effectively mitigating the hazards identified.		
	0.4	Responsibility and Handovers. Each EPC and Subcontractor OHS management plan will clearly identify the chain of accountability for OHS management within the company and, in the case of hazardous work, for each specific activity. The OHS management plan will clearly describe the handover mechanisms to be used by each responsible person when they are going off shift or when they are handing over responsibility to incoming staff members or managers on the following shift.		
	1.1	The anticipated normal working hours for the site is eight (08) hours per day from Monday to Saturday. The maximum hours worked and rest periods will be in compliance with Vietnam labour laws and other relevant laws and regulations.		-
	1.2	Worked hours will be monitored to ensure personnel continue to function safely if conditions are of a demanding nature (e.g., excessive heat).		-
	1.3	Break periods will be provided during the morning and afternoon shift sessions and for lunch.		-
	1.4	During rainy conditions, if working conditions are unsafe, all excavation work and working below ground will be stopped.		-
	1.5	During rainy conditions, wet weather gear will be provided by		-

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		contractor to allow all other work to continue where possible, taking into account any potential HSSE issues.		
	1.6	During windy conditions, if working conditions are unsafe, all working at height will be stopped.		
	1.7	During lightning conditions in near proximity to the site, no outside work will be conducted.		-
	1.8	EPC Contractor and its Subcontractors will explain how hazards associated with working outside normal hours will be managed. This includes after hours, night shifts and weekend operations. Particular attention will be paid to: a) Authorization of work outside normal hours. b) Levels of supervision, which are adjusted based on the number of Personnel working. c) Task observation and monitoring of personnel. d) Lighting conditions at the site and access to the site. e) Sites that are identified as being potentially hazardous if undertaken outside of daylight hours, e.g., lifting operations, marine work, explosive work. f) Medical cover. g) HSSE / construction supervision cover.		-
	1.9	Night work will be minimized wherever and whenever possible.		-
Work Clothing and High Visibility	2.1	The working clothes will be required to be task specific and not offend any cultural sensitivity.		-
	2.2	The wearing of short pants, sleeveless shirts (vest for men) will not		-

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		be allowed. EPC Contractor staff will be required to be responsible for wearing clothing suitable to the working environment and avoid wearing loose and or torn clothing that could expose any part of the body that may offend cultural sensitivity.		
	2.3	High heels shoes are prohibited on site.		-
	2.4	Long hair must be properly tied up to reduce risk of entanglement.		-
	2.5	EPC Contractor shall advise the colour of the overalls to be worn by personnel. EPC Contractor shall also advise how the various trade disciplines will be easily visually recognisable (colour of overalls). EPC Contractor shall advise how the supervision shall be easily visually recognisable (colour of overalls and/or hard hat).		-
	2.6	Banksmen and riggers shall wear high visibility orange colour tabards.		-
	2.7	EPC Contractor shall note that the wearing of high visibility clothing shall be mandatory throughout the complete construction site including all construction facilities.		-
Site Notices	3.1	All personnel will be required to comply with all notices on the site.		-
	3.2	EPC Contractor will ensure that all necessary barriers, warning signs and notices are posted at prominent locations around the site.		-

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	3.3	Such signs and notices will include, but not be limited to, the following: <ul style="list-style-type: none"> • “DANGER” • “NO ENTRY” • “RESTRICTED AREA” • “NO SMOKING” • “NO NAKED LIGHTS” • “DANGER HIGH VOLTAGE” • “X-RAY IN PROGRESS” • “TOXIC SUBSTANCE” • “HYDROTEST IN PROGRESS” • “EYE PROTECTION AREA” • “HEARING PROTECTION AREA” • “NO MOBILE PHONES” 		-
	3.4	All signs and notices displayed at the site will be in both Vietnamese and English languages. It is the responsibility and obligation of any personnel entering the site to abide by these warnings.		-
	3.5	All signs and notices will be sufficiently large to be seen by Personnel and will utilize robust, durable, high visibility material. Signs made by laminated posters will be utilized as much as possible.		-
	3.6	Posters, notices and HSSE Policies will be posted in key locations around the site to maintain safety awareness. HSSE Notice Boards will be used to inform personnel about particular issues and about progress in achieving objectives, results of inspections and accident		-

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		investigation findings.		
Personal Protective Equipment (PPE)	4.1	Safety Helmets a) Shall meet either BS, AS, DIN or ANSI or equivalent standards or equivalent and shall be fitted with a chinstrap. b) The safety helmet should be colour coded to identify the following: <ul style="list-style-type: none"> • Employer (LSP); • EPC Contractor workforce; • HSSE reps and First Aiders; • Visitors and “New Starts;” • All safety helmets shall bear the Employer or EPC Contractor logo (self-adhesive sticker) on the front of the safety helmet; • Safety helmets for First Aiders shall bear a green cross (self-adhesive sticker) on both sides of the safety helmet; and • EPC Contractor shall note that the wearing of safety helmets shall be mandatory throughout the construction site and construction facilities. 		-
	4.2	Safety Boots a) Based on the findings of a suitable and sufficient Work Method Statement and/or Job Safety Analysis for a particular task/work activity, appropriate safety boots must be worn.		-
	4.3	Gloves a) Based on the findings of a suitable and sufficient Work Method Statement, Job Safety Analysis and/or MSDS for a particular		-

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		task/work activity, appropriate safety gloves must be worn.		
	4.4	Eye protection a) Based on the findings of a suitable and sufficient Work Method Statement, Job Safety Analysis and/or MSDS for a particular task/work activity, appropriate eye protection must be worn.		-
	4.5	Training Training for use of ordinary PPE is given during the Induction Training for new entrants, and specific PPE training, such as for using respirators, is given by EPC Contractor's HSSE Manager or competent HSSE supervisors or by other persons nominated by the HSSE Manager.		Worker Training Management Plan (ref: LSP-1S01-0003)
	4.6	Hearing Protection Shall consist or disposable ear plugs, ear insert plugs or earmuffs that meet either BS, DIN, AS, or ANSI or equivalent standards. The occupational noise level limit is 80dB.		-
	4.7	Respiratory Protection a) Respiratory protection equipment (RPE) must be suitable for the hazard presented by the work activity, i.e., the potential health problem that could arise. b) Disposable respirators for nuisance dusts shall comply with either BS, DIN, AS or ANSI or equivalent standards and shall have a protection factor of at least 10. c) Respiratory protective equipment for other types of work activity, i.e., paint spraying, welding galvanised steel, or using other		-

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		<p>toxic materials, shall be detailed exactly in the method statement. All such RPE shall comply with BS, DIN or ANSI or equivalent standards.</p> <p>d) A test and maintenance schedule shall be put in place for RPE, as required (e.g., BA sets) and record the result.</p> <p>e)</p>		
	4.8	<p>Safety Harnesses and lifelines</p> <p>a) Where it is not practicable to provide a standard working platform safety harnesses shall be worn. When working on open steel or erecting/ dismantling scaffolding a securely attached safety harness and where appropriate an inertia reel shall be used.</p> <p>b) Safety harnesses and lifelines, which shall fitted with snap hooks with locking mechanism, must be approved to BS or ANSI or equivalent standards and be properly maintained and regularly inspected at a monthly intervals. The EPC Contractor shall keep a record of such inspections.</p> <p>c) Where safety lifelines are not adequate an inertia reel shall be supplied by the EPC Contractor. Six monthly examinations of inertia reels shall be carried out by an independent examiner in addition to the normal monthly checks carried out by the EPC Contractor.</p> <p>d) Colour coding on inertia reels shall be as per lifting equipment.</p> <p>e) EPC Contractor employees shall not move a distance of more than 3 m (10') horizontally away from the inertia reel secure</p>		-

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		anchorage point. f) Shock absorbing lanyards shall be used. g) Safety belts are not acceptable. h) Inertia reel shall be to either BS, AS, DIN or ANSI or equivalent standards. Inertia reel Lanyards and webbings shall be made from manmade fibres (natural fibres are not allowed).		
Permit To Work	5.1	Every item of work to be done must be evaluated to determine whether specific Permit to Work is required or not.		-
	5.2	Procedures will be developed for the following Permit to Work activities: a) Hot work, e.g., welding, cutting with torch, etc. b) Cold work in designated locations. c) Entry in a confined space. d) Deep excavations and trenching. e) Pressure testing (hydrostatic, pneumatic). f) Entering or operation of mobile cranes, vehicles or other construction equipment at designated locations. g) Radiation work. h) Other work or locations designated by EPC Contractor.		-
	5.3	The written Permit to Work Procedures must describe the following: a) Conditions and type of work requiring Permits to Work. b) Department / Authority who issues Permits. c) Deadlines for submissions of applications. d) Application process / steps.		-

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		e) Survey and/or measurements required.		
	5.4	The Permit to Work procedure and various works subject to the Permit to Work must be established and all relevant personnel responsible for the work, including Subcontractors, must be fully trained in the use of the procedures and associated method statements.		-
	5.4	The Permit to Work procedure must apply to any work being performed outside the site boundary fence, where it is being undertaken in respect of the Project.		-
Fire Prevention & Protection	6.1	General a) EPC Contractor will appoint a specialist with adequate training and experience in fire prevention and firefighting to coordinate the overall fire prevention and firefighting program, fire prevention/ fighting training program, and the training of firewatchers at the work site. b) Emphasis is placed on pre-planning, Hot Work Permit controls, flammable gas, liquid, and material control; the control of smoking; training and use of warning signs, proper electrical wiring, and proper waste storage and removal.		Emergency Response Plan (ref: LSP-1S01-0002)
	6.2	Hot Work a) Fire hazardous areas requiring to be defined as a Hot Work area are designated by the EPC Contractor's Site HSSE Manager after		Emergency Response Plan (ref: LSP-1S01-0002)

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		<p>consulting the Employer's responsible personnel, and the work is to be carried out in accordance with the Project Permit to Work procedure.</p> <p>b) All inflammable materials and debris near and/or under any hot work, such as welding, gas cutting, etc., will be removed or covered with non-combustible materials.</p> <p>c) Fire extinguishers will be supplied near and/or under the hot work locations.</p> <p>d) An experienced person will be assigned responsibility for the hot work.</p> <p>e) The person responsible will always inspect and validate the workplace and conditions. Such inspection includes checks on whether there are any fire hazards during the work and that no sources of fire remain after the work as well as the proper containment of sparks during cutting, grinding and welding activities.</p>		
	6.3	<p>Fire Extinguishers</p> <p>a) Fire extinguishers will be provided where the potential for fire is increased, such as in offices, smoking sheds and hot work areas including near electrical equipment or diesel / gasoline engine equipment.</p> <p>b) EPC Contractor HSSE Department will determine actual locations and number of extinguishers to be placed at appropriate locations.</p>		Emergency Response Plan (ref: LSP-1S01-0002)

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		c) The fire extinguishers will be appropriate for the type of fire hazard present. d) OSHA guidelines will be referenced for type and applicability of type. e) The type, capacity, and number of fire extinguishers will be subject to the EPC Contractor / Sub EPC Contractor HSSE Manager's approval. f) HSSE Supervisors will inspect the locations and condition of the fire extinguishers periodically according to a predetermined schedule and or checklist. g) Any engine driven plant brought onto the Site shall have, as a minimum, one Dry Powder extinguisher mounted on or adjacent to it. h) As part of the general site induction, an appropriate amount of workers are trained and competent in the use of fire extinguishers. i) Inspection of firefighting equipment shall be arranged once per month with equipment being marked appropriately.		
	6.4	Gas and Oxygen Equipment Gas and oxygen equipment will be required to comply with approved standards. The following minimum requirements shall be met for all gas and oxygen equipment: a) Cylinders shall be in good condition and not suffer from corrosion.		-

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	<p>b) They shall be properly colour coded in accordance with EN 1089-3.</p> <p>c) Hoses shall be properly colour coded to the internationally recognized standard for the gas being used, in good condition and fitted with hose connectors attached by permanent clips (not jubilee clips).</p> <p>d) Check valves and flashback arrestors shall be used on at least one end of the hoses at all times, and preferably fitted to both ends.</p> <p>e) The equipment must be properly maintained.</p> <p>f) Users shall check the equipment for perished, damaged hoses, regulators, and pressure gauges, etc. Defects must be reported to their supervisors and the defective items replaced.</p> <p>g) Suspected leaks shall be confirmed by a soap solution at the start of work every day. If the leak cannot be cured the equipment must be withdrawn.</p> <p>h) Gas cylinders must not be left lying around. Arrangements shall be made to store cylinders in an open mesh fenced compound. Before constructing any temporary gas compound or using an existing gas storage area.</p> <p>i) A Subcontractor will obtain permission from EPC Contractor to utilise their designated gas cylinder storage space.</p> <p>j) EPC Contractor will provide suitable facilities to minimize manual handling of cylinders.</p> <p>k) Cylinders shall be kept in trolleys, or tied off.</p>		
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	<p>l) A bottle key shall be kept with cylinders in use.</p> <p>m) Stored oxygen and fuel gas cylinders shall be kept separate with a minimum separation distance of 5m.</p> <p>n) Empty cylinders must also be separated from full cylinders.</p> <p>o) Cylinders must never be stored or used in a horizontal position but must be secured in an upright position.</p> <p>p) All gas cylinders must be handled with care and they must not be misused or abused.</p> <p>q) All gas cylinders must be properly shut off when not in use and safety caps must be fitted when being moved.</p> <p>r) Great care must be taken to ensure that gas equipment, including hoses, is not allowed to cause obstruction of roadways, walkways, manholes, ladders or other means of access where they can cause hazards or be damaged.</p> <p>s) Hoses shall be routed to avoid trip hazards or damage.</p> <p>t) Hoses not in use should be coiled up and put in a safe place.</p> <p>u) Hoses should whenever possible be supported off the ground.</p> <p>v) Where any operation involves the use of gas and oxygen equipment in enclosed or semi-enclosed spaces, the user and his supervisor will be required to carry out frequent checks to ensure procedures are complied with.</p> <p>w) During meal breaks and at stopping times, hoses and torches shall be removed from confined spaces or excavations.</p>		
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		x) Oxygen or gas cylinders must not be taken into confined spaces for use or storage. y) No modification to tanks or drums which have contained flammable liquid shall be undertaken. z) The torch will be required to only be ignited using a lighter designed for this purpose.		
	6.5	Explosives a) No explosives will be allowed on the site other than cartridges used in cartridge operated fixing tools or where approved by LSP. b) EPC Contractor will promptly advise Employer of any requirement for the use of explosives. c) If blasting work is required, EPC Contractor will carry out a risk assessment and develop a Safety Work Method Statement, which needs to be submitted to LSP for approval. d) Blasting will only be done by a certified and approved Subcontractor.		-
Scaffolding	7.1	Erection of scaffolds which are metal-tube/system/slung/bracket type/movable scaffolds, debris nets, staircases and ramps, ladders and trestles will be carried out by authorised and competent scaffolders.		

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	7.2	<p>The EPC Contractor must develop, implement and maintain a scaffolding procedure, which includes but is not limited to the following:</p> <ul style="list-style-type: none"> a) Scaffolds shall be inspected at weekly intervals, after severe weather conditions, and after any event that may affect the integrity of the scaffold such as modifications. b) The inspection shall be carried out by the Authorised Scaffold Inspector who shall sign and date the scaffold tag. c) After each inspection, scaffolding that is not considered safe such as the scaffolding of partly erected or dismantled scaffolding shall have the scaffold tag withdrawn and a prominent "DO NOT USE" sign displayed. d) All findings and inspections shall be recorded in the Contractors' scaffold inspection register. e) Scaffolding must not be disturbed or altered by any unauthorised persons. f) Where alterations are required by the EPC Contractor, they must contact the Scaffolding Supervisor. g) Where materials are to be positioned on scaffolding the Scaffolding Supervisor must ensure that the scaffolding is not overloaded. h) EPC Contractor's will install material guards to the scaffolding when storing materials. i) A scaffold register shall be kept by the authorised Scaffold 		
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	<p>Inspector. This shall contain:</p> <ul style="list-style-type: none"> • Date of first and subsequent weekly inspections; • Individual identifications of all scaffolds which shall be cross referenced to The Scaffold Tag identity number; • Clear name and signature of the authorised scaffold inspector against each separate scaffold inspected; and • Details of any defects and corrective actions taken. <p>j) No scaffold may be erected which impedes normal access or can be accidentally struck by moving plant.</p> <p>k) EPC Contractor will not erect or carry scaffolding near live overhead electrical cables, or equipment because of the danger of tubes making accidental contact with electrically charged apparatus.</p> <p>l) If there is any doubt about the security of any anchorage, suspension points or ties for a scaffold e.g., strength of existing buildings/structures, or those under construction, the EPC Contractor must be consulted before the Scaffolding Supervisor proceeds with the erection.</p> <p>m) All scaffolds must be provided with suitable access and where ladders are used for this purpose they must be of an adequate length and properly secured by lashing or fixing to prevent displacement.</p> <p>n) Rolling scaffolds shall not be constructed with a height greater than three (3) times the minimum base width and shall only be used on level ground. The wheels on rolling scaffolds shall be</p>		
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		equipped with brakes.		
Tools and Portable Powered Equipment	8.1	The EPC Contractor must develop, implement and maintain safety procedure for tool usage, including but not limited to: grinding tools, pneumatic tools, wood working machines, etc.		
	8.2	The procedure, must include but not be not limited to the following: a) Ensures the regular inspection and the safe use of electrical tools and equipment before use. Electrical equipment includes all fixed, portable and transportable mains and battery operated equipment. b) Repair or installation of any electrical equipment must only be carried out by a competent qualified electrician.		
Mechanical and Heavy Equipment	9.1	The EPC Contractor must develop, implement and maintain safety operating procedures for all Mechanical and Heavy Equipment.		
	9.2	This safety operating procedures must include but not be limited to the following: safe working practices, appropriate PPE, refuelling procedures, details and use of safety devices, and ensure that repairs and maintenance is only undertaken by a competent mechanic.		
Electrical Work	10.1	The EPC Contractor must develop, implement and maintain an electrical works procedure at the site. This procedure must cover electrical work on site, electric appliances for construction, movable wiring, transformer banks, electrical distribution panel boards, circuit breaker, electrical work, overhead power lines.		
	10.2	The electrical works procedure must include but not be limited to		

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Hazardous Materials Management		<p>the following:</p> <ul style="list-style-type: none"> a) All temporary electrical installations for site power distribution must comply with Vietnamese Local, National as well as International Standards, Codes and/or Regulations. b) High voltage installations shall be safe and secure from the general workforce, with adequate warning signs. c) Temporary Power Generation and Sub-Stations installations shall be Fit-for-Purpose and suitable for safe operation under extreme wet weather conditions likely to be experienced during the monsoon season. d) Site temporary electrical installation work plan will be prepared and subject to LSP's approval prior to installation. e) Portable generators must be earthed via earth rods. f) Inspections of electrical cables and equipment will be undertaken before they are brought onto the site. g) Any defective electrical cables or equipment shall be replaced or rectified immediately. h) Those electrical items that comply at the time of inspection shall be given a certificate and a label and added to an Electrical Equipment Inspection Report. i) Lock-Out and Tag-Out system for electrical work must be implemented. 		
	11.1	The EPC Contractor must develop, implement and maintain a hazardous materials management plan for the site. This procedure		Hazardous Materials Management Plan (LSP)

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		refers to the handling, storage and use of hazardous substances or materials. Based on the information found on manufactures material safety data sheets (MSDS) etc.		Doc. No : LSP-1S01-00016)
Excavation Work	12.1	The EPC Contractor must develop, implement and maintain a procedure for undertaking excavation work, to ensure it is carried out safely and without risk of collapse of the sides of trenches, etc.		
	12.2	During earth work activity if the disposal of buried or sunk property is found at the project site or temporary facility yard the chance find procedure (ref: LSP-1S03-0003) must be referred to.		Cultural heritage Chance Find Procedure (ref: LSP-1S03-0003)
Working At Height	13.1	The EPC Contractor must develop, implement and maintain a working at height procedure for the site. The working at height procedure must ensure personnel are not at risk from falls whilst working at heights of 1.8 m or above.		
	13.2	<p>The working at height procedure must include but not be limited to the following:</p> <ul style="list-style-type: none"> a) Workers shall be trained on how to correctly use fall prevention devices anywhere that involves risks as well as how to use personal fall arrest systems.(secondary fall protection). b) Use control zones & safety monitoring systems to protect workers in all hazard zones. c) Any work which results in openings being created where persons can fall through, or removal of side walling/barriers where persons can fall from must be effectively protected to prevent injury 		

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	<p>and will require a detailed safety work method statement, work permit and designated supervisor.</p> <p>d) Fall protection shall be mandatory when working above 1.8 m in height unless a fixed platform is used with guard or hand rails verified by a competent person.</p> <p>e) Safety netting shall only be considered as protection against dropped objects and not for personal fall protection.</p> <p>f) All personnel shall wear an approved full body harness and shock absorbing double lanyard when exposed to fall hazards.</p> <p>g) Personnel shall make maximum use of primary fall protection systems such as scaffolds, aerial lifts, hoists, etc. These systems shall be equipped with complete working / walking surfaces free of floor openings, standard guard rail systems and a safe means of access.</p> <p>h) Fall protection devices such as lifelines, safety harnesses / lanyards shall be inspected on a regular basis for damage and deterioration. Defective equipment shall be removed from service and destroyed.</p> <p>i) Fall protection devices subjected to shock loading imposed during fall arresting shall be removed from service.</p> <p>j) Prevent materials from being dislodged such as construction materials by using temporary fall protection measures.</p> <p>k) Mobile Elevating Work Platforms shall only be operated by approved, trained operators.</p>		
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		l) Establishment of HSE procedures on Ladders to reduce the number of slip and fall (see section below).		
	13.3	<p>The following conditions apply to the use of ladders at the site:</p> <p>a) Only CE marked (European Standard) industrial Class 1 & 2 ladders and stepladders or International Standard equivalent will be used on site.</p> <p>b) Site assembled ladders of nailed timbers construction shall not be permitted.</p> <p>c) Ladders must be in good condition and free from defects i.e., broken rungs, split stiles. Ladders must not be painted.</p> <p>d) Ladders must be securely fastened at the top.</p> <p>e) Ladders must be properly positioned at the base.</p> <p>f) Ladders must be extendable at least 1 m above the working platform.</p> <p>g) Ladders must be at an angle of 300 mm (1') out for every 1.2 m (4') vertical drop.</p> <p>h) Ladders and stepladders used by electricians (and others working in close proximity of live electrical installations) shall be nonconductive.</p>		
Working Over Water	14.1	The EPC Contractor must develop, implement and maintain a Working Over Water procedure for the site.		
	14.2	<p>The working Over Water procedure must include but not be limited to the following:</p> <p>a) Provide barriers and any other protective measures to</p>		

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		<p>prevent personnel from falling into water.</p> <p>b) Provide buoyancy aids to all personnel working over (or near) water where there is a possibility of falling in and drowning.</p> <p>c) Supply a sufficient number of life buoys to be permanently located at the point(s) of danger.</p> <p>d) The life buoys will be attached to a throwing line of sufficient length and strength.</p> <p>e) Where rescue of a person falling into the water may be required, a standby boat crewed by competent boatman, trained in rescue and resuscitation techniques shall be provided.</p> <p>f) Any requirements concerning need to warn fishermen or shipping of diving activity such as flying of flags and use of other signals will be provided.</p>		
Confined Space Entry	15.1	The EPC Contractor must develop, implement and maintain a Confined Space Entry procedure for the site.		EPC Contractors Confined Space Entry Procedure
	15.2	<p>The Confined Space Entry procedure must include but not be limited to the following:</p> <p>a) All workers should receive training before entering to work in a confined space.</p> <p>b) Permits to work will be applied to all works in confined spaces, etc.</p> <p>c) Use safety precautions (such as self-contained breathing apparatuses, life lines and safety watch worker station kitted with</p>		EPC Contractors Confined Space Entry Procedure

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		<p>rescue and first aid equipment).</p> <p>d) Ensure the availability and adequacy of PPE.</p> <p>e) Electrical lighting for use in confined spaces must be regulated to a safe working voltage. This would generally require a voltage not to exceed 42 volts (and explosion proof where applicable). If this requirement cannot be met, a risk assessment shall be carried out to make the Confined Space work safe.</p> <p>f) Powered hand tools used in confined spaces should, where possible, be air operated.</p>		
Lifting and Rigging Operations	16.1	The EPC Contractor must develop, implement and maintain a Lifting and Rigging procedure for the site.		
	16.2	<p>The Lifting and Rigging procedure must include but not be limited to the following:</p> <p>a) All Lifting devices will be initially inspected by a competent person for serviceability and colour coded as required to the relevant colour for that period.</p> <p>b) They shall be subsequently inspected by the user of the equipment prior to lifting activities taking place.</p>		
Welding and Cutting	17.1	The EPC Contractor must develop, implement and maintain a Welding and Cutting procedure for the site. This procedure must cover welding, electric arc welding, gas cutting and gas welding and is primarily to control the risks and hazards present in welding and cutting.		
	17.2	The Welding and Cutting procedure must include but not be limited		

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	<p>to the following:</p> <p>a) Welding sets shall be in good condition, properly maintained, and properly earthed.</p> <p>b) Isolation switches on welding sets shall be readily accessible.</p> <p>c) Terminals and live components shall be adequately protected.</p> <p>d) Cables shall be frequently inspected to ensure the insulation is intact.</p> <p>e) Damaged cables or electrical holders shall be properly repaired or replaced.</p> <p>f) The welding return cable shall be secured onto the work piece. If this is not practical it shall be as close as possible.</p> <p>g) Proper cable connectors shall be used when connecting runs of cables.</p> <p>h) Welders shall wear:</p> <ul style="list-style-type: none"> • Face and eye protection with the correct grade of filter. • Welder's gauntlets. Long sleeved flame retardant overalls. <p>i) Welders shall wear safety helmets at all times, except whilst welding, when it is agreed as impractical, and written permission is granted by LSP subject to mitigation of hazard, i.e., no works overhead, or shielded from falling objects.</p> <p>j) Welding areas shall whenever possible be screened off using flame retardant blanket or other suitable material.</p>		
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Radiography	18.1	The EPC Contractor must develop, implement and maintain a Radiography procedure for the site, where relevant to their work activity. This Procedure covers Ionizing radiation, controlled areas, radiation dose limits, medical examination, storage of radioactive materials, transportation of radioactive materials, emergency work and the hazards involved with this process.		
	18.2	<p>The Radiography procedure must include but not be limited to the following:</p> <ul style="list-style-type: none"> a) Handling and using radioactive sources should strictly comply in accordance with Vietnamese Decree No. 50/1998/ND-CP dated July 16, 1998, Vietnamese Standards (TCVN 6866:2001): Radiation protection – Dose limits for radiation workers and public, Circular No. 32/2008/TT-BLDTBXH guiding procedures for registration and verification of machines, equipment and supplies subject to strict labour safety requirements and Law 18/2008/QH12: Nuclear energy. b) Radiography areas are clearly marked using barrier tapes, notices and flashing lights. c) Audible warning (horns) must be sounded before a source is exposed. d) Only Classified workers are engaged in radiography work. e) All other personnel are clear of the area before radiography takes place. f) Radiography work is supervised by a Qualified Radiation 		

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	<p>Protection Advisor.</p> <p>g) Any incidents which may have resulted in over-exposure of any personnel shall be brought to the attention of the Employer for investigation.</p> <p>h) A written emergency procedure is to be followed in the event of the loss of an isotope or damage or malfunction of associated equipment. This procedure must be submitted to LSP for approval before commencement.</p> <p>i) Radiography is carried out only outside of the site working hours and notification is received 24 hours in advance. During Commissioning activities the notification period shall be extended.</p> <p>j) A valid permit to work must be available.</p> <p>k) EPC Contractor will erect notice boards, in prominent positions, prior to the commencement of radiography that shall state the following:</p> <ul style="list-style-type: none"> • Warning! Radiography taking place; • Source type and yield; • Date and time of shots; • Location; • Name of operative and contact number; • Name of Radiography Senior Person (RSP) and contact number; • Contact number of Radiography Protection Agency (RPA); <p>and</p>		
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		<ul style="list-style-type: none"> Emergency contact number for the EPC Contractor. <p>l) EPC Contractor who is not involved in radiography work must ensure that Work Force observe warning signs, alarms and barriers in use where such work is being carried out.</p> <p>m) EPC Contractor who carries out radiography on the site or off-site must comply with safe systems of work.</p>		
Housekeeping Plan	19.1	<p>The EPC Contractor must develop, implement and maintain a Housekeeping Plan for the site, as it is the responsibility for all EPC Contractor and Subcontractor employees to keep the site, camps, and other facilities clean and orderly at all times. The objectives of housekeeping are to:</p> <p>a) Eliminate the cause of accidents and fires by removing obstacles and flammable hazards that might interfere with activities and passage of personnel and vehicles, and become a source of fire.</p> <p>b) Effectively utilize area and equipment by providing comfortable and safe working conditions.</p> <p>c) Create and maintain hygienic and safe working conditions.</p>		
	19.2	All employees will be encouraged to maintain their work areas to the highest standards of housekeeping.		
	19.3	After each day's work, all work crews will be required to spend 15 minutes to clear their work locations and arrange the materials and equipment in order.		
	19.4	Every Saturday and or day nominated by LSP, the EPC Contractor		

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		will organize an overall site clean-up by EPC Contractor and Subcontractors' employees, lasting at least 30 minutes.		
	19.5	<p>The Housekeeping Plan will include but not be limited to the following:</p> <p>a) Good housekeeping (excessive waste debris, loose construction materials, liquid spills, etc.) will be a proper measure for safety.</p> <p>b) Common areas for which personnel have access to such as lockers, toilets, mess rooms and washrooms shall be maintained in clean and good sanitary conditions at all times.</p> <p>c) All areas shall be kept free from litter and general refuse at all times and waste skips and garbage bins with suitable covers shall be provided at designated locations.</p> <p>d) Cleaning up regularly excessive waste debris and liquid spills; all waste disposal points shall be maintained and cleaned regularly. All staircases, passageways, corridors and emergency escape routes shall be kept clear at all times.</p> <p>e) No materials, finished products, aggregates, plant and construction materials shall block emergency exits or other means of escape at any time.</p> <p>f) Trade waste shall be promptly removed from the site on completion of the pertinent tasks.</p> <p>g) Tools shall not be stored on the floor or any location that</p>		<p>Soil and Groundwater Management Plan (ref: LSP Doc. No: LSP-1S01-0012)</p> <p>Emergency Response Plan (ref: LSP-1S01-0002)</p>

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		<p>could potentially cause an accident.</p> <p>h) All lighting and ventilation facilities shall remain unobstructed at all times.</p> <p>i) Locating electrical cords and ropes in common areas and marked corridors.</p> <p>j) Using slip retardant footwear.</p> <p>k) Putting barriers around deep excavation areas (more than 1.2 m depth). Holes in floors should be guarded, and covered. Cover shall be secured and marked "HOLE BELOW"</p>		
Occupational Noise	20.1	No employee should be exposed to a noise level greater than 85 dB(A) for a duration of more than 8 hours per day without hearing protection. In addition, no unprotected ear should be exposed to peak sound pressure level (instantaneous) of more than 140 dB(C).		Noise and Vibration Management Plan (ref: LSP Doc. No : LSP-1S01-0009)
	20.2	The use of hearing protection should be enforced actively when the equivalent sound level over 8 hours reaches 85 dB(A), the peak sound levels reach 140 dB(C), or the average maximum sound level reaches 110 dB(A). Hearing protective devices provided should be capable of reducing sound levels at the ear to at least 85 dB(A).		
	20.3	Prior to the issuance of hearing protective devices as the final control mechanism, use of acoustic insulating materials, isolation of the noise source, and other engineering controls should be investigated and implemented, where feasible.		
	20.4	Periodic medical hearing checks should be performed on workers exposed to high noise levels.		

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Extreme Weather	21.1	EPC Contractor will ensure adequate surface slopes and drainage ditches are constructed to minimize time lost to inclement weather.		-
	21.2	EPC Contractor will prepare pumping system with efficient capacity to pump out rainy water to avoid flooding at the site.		-
Mobile Phone Use	22.1	Mobile phones shall be restricted on site. a) General workers will be discouraged from using mobile phones on the project site. b) It is recognised that during the construction works, supervisory personnel will require the use of mobile phones for efficient communications. Any person in a Supervisory role shall be allowed to use mobile phones whilst on site. Supervisors shall wear white helmets to clearly identify themselves.		-
First Aid	23.1	EPC Contractor will provide a clinic for first aid treatment that will be equipped with a bed, stretcher, chair, table, heating, lighting, and sink with water supply, cabinets, and first aid equipment including a portable defibrillator.		Emergency Response Plan (ref: LSP-1S01-0002)
	23.2	EPC Contractor and its Subcontractors will provide First Aid boxes for emergency use only.		-
	23.3	EPC Contractor and its Subcontractors will supply a sufficient number of First Aid boxes to suit the size of the workforce, and locate them in close proximity to the work areas and check regularly and record the result.		-
	23.4	The stock of disposable medical items will be maintained according to the number of employees and consumption.		-

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	23.5	Guidance for medical personnel is one advanced First Aid staff per 50 workers and EPC Contractor will ensure that adequate number of employees are trained in First Aid. First Aiders will be competent people, trained in First Aid at Work.		-
	23.6	First Aiders will be recognised by posted photographs, detailing name, location, and company and contact number. First Aider's safety helmets will have a self-adhesive green cross sticker affixed to each side basically. EPC Contractor Site HSSE Manager will organize and control the design of the first aid high visibility jacket or vest will be developed with other function of HSSE personal identification.		-
	23.7	A first aider holding a current certificate issued by an accredited association will be able to become "Principal First Aider" The principal First Aiders will have attended an appropriate, approved course resulting in the award of a First Aider at Work Certificate.		-
	23.8	The principal First Aider will be available at the first aid station of each Subcontractor at all times during the work.		-
Medical Facility	23.1	EPC Contractor will provide a Medical Facility, which will include: a waiting / reception area, consultation / examination area, treatment area, sickbay / observation area, sanitary facilities, secure storage for drugs and medical equipment and confidential storage of medical records. The facility will maintain appropriate medical equipment and supplies to provide first aid, immediate treatment and stabilization of major illness and injury arising out of,		Emergency Response Plan (ref: LSP-1S01-0002)

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		or during, the course of the works.		
	23.2	Medical oxygen shall be provided if any asphyxiation gas such as CO ₂ or nitrogen is used in the works.		-
	23.3	A detailed inventory of medicines and drugs shall be kept and checked regularly.		-
	23.4	Plans for medical transport / evacuation of injured or ill personnel including detailed specifications for a dedicated ambulance and arrangements for on-going care.		-
Medical Staff	24.1	A Doctor will be available at the site during core working hours and his/her roles and responsibilities are to: <ul style="list-style-type: none"> a) Provide leadership to ensure all medical matters are dealt with in a professional and efficient manner. b) Monitor the health and well being of all Site employees. c) Notify the HSSE Manager of any trends with illness or injuries, especially for infectious disease. d) Make sure the medical facility is equipped with sufficient and adequate materials, consumables, instruments and staff to function effectively. e) Ensure that the medical facilities are kept clean and hygienic and ready to use at all times. f) Be aware of any dangerous substances in use at Site, and obtain any Material Safety Data Sheets (MSDS) to be able to take proper care when required g) Periodically check hygiene conditions of the canteens / 		-

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		<p>restaurants, including all food preparation, cooking and serving areas, and inspect and perform regular medical checks on canteen / restaurant staff to confirm they are free from any condition that may affect hygiene requirements.</p> <p>h) Periodically check the hygiene conditions of all camps.</p> <p>i) Perform drug / alcohol tests on personnel as directed by the HSSE Manager, and arrange for analysis and report to the HSSE Manager.</p> <p>j) Keep accurate records of all medical matters and ensure they are kept strictly 'Medical in Confidence' and restrict access to Authorised Persons only.</p> <p>k) Prepare a Monthly Report on major activities and topics on medical matters and monthly statistics including trend of patients, for submitting to the HSSE Manager.</p> <p>l) Provide guidance for HSSE Manager on Incident Classifications.</p>		
	24.2	<p>A Nurse will be available at the site during core working hours and his/hers roles and responsibilities are to:</p> <p>a) Provide all possible medical assistance and care to improve the condition of persons suffering injury or illness.</p> <p>b) Administer minor treatment, under the direction of the doctor.</p> <p>c) Be available to attend accidents/incidents on Site to give medical treatment as required.</p>		-

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		d) Assist the doctor in carrying out training programs for construction personnel. e) Dispense pharmaceutical items as prescribed by the doctor, and maintain records of prescription drugs. f) Keep stock records of pharmaceutical/clinic items, and order replacement items to maintain minimum stock levels. g) Report to the doctor on major activities and topics.		
Lavatories and Washing Facilities	25.1	The EPC Contractor will supply adequate lavatory and washing facilities that are suitable for the number of workers at the site to ensure sanitary conditions for workers.		Workers Accommodation Management Plan (ref: LSP-1S01-0004)
	25.2	In supplying the lavatories and washing facilities the EPC Contractor must have due regard to: a) Local lavatories and methods of showering system. b) Providing necessary lighting system and ventilation. c) Keeping all toilets and other sanitary facilities clean and in working order. The floors, walls and ceilings of sanitary conveniences shall be of a finish that can be easily cleaned. d) Providing all sanitary conveniences and washrooms with window openings to the outside air as a ventilation system. The proportion of window surface shall not be less than 10 % of the floor area. e) Providing showers and lavatories with an adequate supply of water and have adequate drainage and shall be made of material to		Workers Accommodation Management Plan (ref: LSP-1S01-0004)

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		<p>prevent fungus infections of the feet.</p> <p>f) Providing adequate supply running water.</p> <p>g) All waste water including floor-washing water to be connected to a disposal drain.</p> <p>h) Separating male and female facilities, such as independent toilets and showers with a lock.</p> <p>i) All septic tank and sewage treatment waste being disposed of in accordance with the National Vietnamese Standards, Codes of Practice and/or Regulations.</p>		
Drinking Water	26.1	<p>The requirements on drinking water quality standards (QCVN 01:2009/BYT and the Prime Minister's Directive on Drinking Water Safety and Environmental Sanitation in Rural Areas) to ensure potable water supply for workers during the construction period will be followed:</p> <p>a) Local drinking water supply system is utilized for drinking water supply.</p> <p>b) Periodically the water quality will be inspected following the applicable standard: QCVN 01:2009/BYT.</p>		Workers Accommodation Management Plan (ref: LSP-1S01-0004)

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5 MONITORING

5.1 LSP HSSE TEAM

An environmental monitoring plan has been developed to track the effectiveness of the mitigation measures during construction. Details of LSP's environmental monitoring plan are provided in Chapter 7 of LSP's Construction Health, Safety and Environment Management Plan (ref: LSP-1S01-005).

5.2 CONTRACTORS TEAM

In order to assess the effectiveness of the mitigation / management measures and identify the need for further action, the contractors worker occupational health and safety monitoring programme outlined in *Table 5.1* will be followed.

Should the monitoring programme note any non-compliances with the MP, corrective action will be taken to ensure the relevant activity returns to compliance in a timely manner and that any corrective action is appropriate and effective. Any corrective actions undertaken must be recorded on the daily report against the relevant activity.

Note to contractor: Delete rows that are not applicable or outside of your control and, in the second column, only include the reference to relevant mitigation / management measures. Insert the name of the responsible party from Table 2-1 for each of the separate monitoring requirements.




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Table 5.1 **Monitoring Programme**

Aspect, Potential Impact / Issue	Reference of Relevant Mitigation Measure *	Sampling Location	Sampling Parameters	Sampling Frequency	Applicable Standards	Responsibility	Reporting
Occupational Health and Safety	1.1 to 1.9; 2.1 to 2.7; 3.1 to 3.6; 4.1 to 4.8; 5.1 to 5.4; 6.1 to 6.5; 7.1 to 7.2; 8.1 to 8.2; 9.1 to 9.2; 10.1 to 10.2; 11.1; 12.1 to 12.2; 13.1 to 13.3; 14.1 to 14.2; 15.1 to 15.2; 16.1 to 16.2; 17.1 to 17.2; 18.1 to 18.2; 19.1 to 19.5; 20.2 to 20.3;	Whole Worksite	Visual Inspection	Weekly	N/A		Weekly (refer to Annex D for report example)


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Aspect, Potential Impact / Issue	Reference of Relevant Mitigation Measure *	Sampling Location	Sampling Parameters	Sampling Frequency	Applicable Standards	Responsibility	Reporting
	21.1 to 21.2; 22.1; 23.1 to 23.8; 24.1 to 24.2; 25.1 to 25.2						
Occupational Noise	20.1	Areas of high noise where work activity is being undertaken	Occupational Noise Levels	Monthly or at the start of a noisy work activity	Decision 3733/2002/QD-BYT		Occupational Noise Report
	20.4	Workers exposed to high noise levels that are under the contractors control	Occupational hearing checks	Annually where exposed to elevated levels of occupational noise	As provided by the onsite Doctors	Onsite Doctor	Workers Hearing Test Reports

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Aspect, Potential Impact / Issue	Reference of Relevant Mitigation Measure *	Sampling Location	Sampling Parameters	Sampling Frequency	Applicable Standards	Responsibility	Reporting
Drinking Water	26.1	Drinking Water Quality Monitoring	Portable water treatment facility / Colour, Odour, Free chlorine, Total coliforms, Faecal coliforms, Hardness, Turbidity, Iron, Manganese	Monthly	QCVN 01:2009/BYT		Laboratory Reports

* See Table 3-1 for mitigation measure.

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6 AUDITING AND REPORTING

An Auditing and Reporting Programme is required to ensure that the mitigation / management measures are appropriate in controlling the identified worker occupational health and safety impacts.

6.1 LSP HSSE TEAM

To ensure compliance with the requirements of this Worker Occupational Health and Safety MP, internal inspections and audits will be undertaken by LSP. The LSP auditing and reporting programme is shown in Chapter 9 of the LSP Construction Health, Safety and Environment Management Plan (ref: LSP-1S01-005).

6.2 CONTRACTORS TEAM

The programme will comprise of the following:

- Internal Audit and Reporting Programme to be undertaken by the contractor's EHS Officer; and
- External Audit and Reporting Programme, to be conducted by the LSP's representative.

The scope of the internal auditing and reporting programme to be undertaken by the contractor is shown in *Table 6.1*.

Note to contractor: In the second column, only include the reference to relevant mitigation / management measures. Ensure the job title for the responsible party is correct for your organisation.




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Table 6.1 Auditing and Reporting Programme

Inspection / Auditing Interval	Reference of Relevant Mitigation Measure*	Responsibility	Scope of Inspection / Audit	Report Submission / Record Keeping
Weekly Inspection (Internal)	1 to 1.9; 2.1 to 2.7; 3.1 to 3.6; 4.1 to 4.8; 5.1 to 5.4; 6.1 to 6.5; 7.1 to 7.2; 8.1 to 8.2; 9.1 to 9.2; 10.1 to 10.2; 11.1; 12.1 to 12.2; 13.1 to 13.3; 14.1 to 14.2; 15.1 to 15.2; 16.1 to 16.2; 17.1 to 17.2; 18.1 to 18.2; 19.1 to 19.5; 20.2 to 20.3;	Contractor's Onsite EHS Officer	Review the submitted weekly monitoring reports to assess the compliance status of relevant operations that may give rise to worker occupational health and safety impacts and provide support to identifying appropriate corrective actions and ensuring they are: introduced in a timely manner; appropriate; and effective	Archive Weekly Monitoring Report in an orderly manner for external auditing All reports are to be maintained at the project site for as long as the Contractor is working at the site


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Inspection / Auditing Interval	Reference of Relevant Mitigation Measure*	Responsibility	Scope of Inspection / Audit	Report Submission / Record Keeping
	21.1 to 21.2; 22.1; 23.1 to 23.8; 24.1 to 24.2; 25.1 to 25.2.			
Monthly Review of Weekly Inspection Reports (Internal)	All	Contractor's General Manager	A monthly report is to be provided to the Contractor's Onsite General Manager, which is to include: the compliance status of relevant operations that may give rise to worker occupational health and safety; identifying any non-compliances that have arisen over the previous months monitoring program; detailing the corrective actions that have been taken when a failure has been noted; and noting the appropriateness and effectiveness of any corrective actions	Archive Monthly Report in an orderly manner for external auditing All reports are to be maintained at the project site for as long as the Contractor is working at the site
Biannual Inspection (External)	All	LSP's Representative	LSP's Representative will review the contractor's onsite activities to assess	A copy of the External Audit Report is to be provided to the contractor


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Inspection / Auditing Interval	Reference of Relevant Mitigation Measure*	Responsibility	Scope of Inspection / Audit	Report Submission / Record Keeping
			compliance with the management plan and review all records of the contractor's internal audit programme to review historic compliance and the use of appropriate corrective actions	<p>for reference and, where necessary, implementation of any identified corrective actions</p> <p>All reports are to be maintained at the project site for as long as the contractor is working at the site</p>


* See Table 3-1 for mitigation measure.

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***ANNEX A – CONSTRUCTION SCHEDULE FOR THE SOURCES OF WORKER
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[Note to contractor: Contractor to insert Gantt chart of construction schedule in Microsoft Project Office format in Annex A]

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ANNEX B – APPLICABLE STANDARDS

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Noise at workplace (for occupational health impact assessment and control)

Decision 3733/2002/QĐ-BYT provides allowed noise values at workplace. The allowed noise values regulated in this Decision is the same to that of TCVN 3985:1999, see below table.


2 hours	95 dBA
1 hour	100 dBA
30 minutes	105 dBA
15 minutes	110 dBA
< 15 minutes	115 dBA
The maximum loudness is not allowed to greater than 115 dBA.	

The continuous noise level equivalent to Leq dBA at workplaces must not exceed 85 dBA in 8 hours.

If the time of exposure to the noise reduces by 50%, the acceptable noise level may increases 5 more dB. For 4 hours of exposure, 5 dB increased, the acceptable level is 90 dBA.


Drinking water quality standards (QCVN 01:2009/BYT)

Or.	Parameter	Unit	Maximum limit	Testing method	Examination Level
I. Perceptible parameters and inorganic constituents					
1.	Colour (*)	TCU	15	TCVN 6185 - 1996 (ISO 7887 - 1985) or SMEWW 2120	A
2.	Taste and odour (*)	-	No strange taste & odour	Perceptible, or SMEWW 2150 B and 2160 B	A
3.	Turbidity (*)	NTU	2	TCVN 6184 - 1996 (ISO 7027 - 1990) or SMEWW 2130 B	A
4.	pH(*)	-	Within 6,5-8,5	TCVN 6492:1999 or SMEWW 4500 - H ⁺	A
5.	Hardness, calculated by CaCO ₃ (*)	mg/l	300	TCVN 6224 - 1996 or SMEWW 2340 C	A
6.	Total Dissolved Solid (TDS) (*)	mg/l	1000	SMEWW 2540 C	B
7.	Aluminum(*)	mg/l	0,2	TCVN 6657 : 2000 (ISO 12020 :1997)	B


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Or.	Parameter	Unit	Maximum limit	Testing method	Examination Level
8.	Ammoniac(*)	mg/l	3	SMEWW 4500 – NH ₃ C or SMEWW 4500 – NH ₃ D	B
9.	Antimony	mg/l	0,005	US EPA 200.7	C
10.	Total Arsenic	mg/l	0,01	TCVN 6626:2000 or SMEWW 3500 - As B	B
11.	Barium	mg/l	0,7	US EPA 200.7	C
12.	Boron and boric acid	mg/l	0,3	TCVN 6635: 2000 (ISO 9390: 1990) or SMEWW 3500 B	C
13.	Cadmium	mg/l	0,003	TCVN6197 - 1996 (ISO 5961 - 1994) or SMEWW 3500 Cd	C
14.	Chloride (*)	mg/l	250 300(**)	TCVN6194 - 1996 (ISO 9297 - 1989) or SMEWW 4500 - Cl ⁻ D	A
15.	Total Chromium	mg/l	0,05	TCVN 6222 - 1996 (ISO 9174 - 1990) or SMEWW 3500 - Cr ⁻	C
16.	Total Copper (*)	mg/l	1	TCVN 6193 - 1996 (ISO 8288 - 1986) or SMEWW 3500 - Cu	C
17.	Cyanide	mg/l	0,07	TCVN 6181 - 1996 (ISO 6703/1 - 1984) or SMEWW 4500 - CN ⁻	C
18.	Flouride	mg/l	1,5	TCVN 6195 - 1996 (ISO10359 - 1 - 1992) or SMEWW 4500 - F ⁻	B
19.	Hydrogen sulfide(*)	mg/l	0,05	SMEWW 4500 - S ²⁻	B
20.	Total Iron (Fe ²⁺ + Fe ³⁺)(*)	mg/l	0,3	TCVN 6177 - 1996 (ISO 6332 - 1988) or SMEWW 3500 - Fe	A
21.	Lead	mg/l	0,01	TCVN 6193 - 1996 (ISO 8286 - 1986) SMEWW 3500 - Pb A	B
22.	Total Manganese	mg/l	0,3	TCVN 6002 - 1995 (ISO 6333 - 1986)	A
23.	Total Mercury	mg/l	0,001	TCVN 5991 - 1995 (ISO 5666/1-1983 - ISO 5666/3 -1983)	B
24.	Molybdenum	mg/l	0,07	US EPA 200.7	C


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Or.	Parameter	Unit	Maximum limit	Testing method	Examination Level
25.	Nickel	mg/l	0,02	TCVN 6180 -1996 (ISO8288 -1986) SMEWW 3500 - Ni	C
26.	Nitrate	mg/l	50	TCVN 6180 - 1996 (ISO 7890 -1988)	A
27.	Nitrite	mg/l	3	TCVN 6178 - 1996 (ISO 6777-1984)	A
28.	Selenium	mg/l	0,01	TCVN 6183-1996 (ISO 9964-1-1993)	C
29.	Sodium	mg/l	200	TCVN 6196 - 1996 (ISO 9964/1 - 1993)	B
30.	Sulfate (*)	mg/l	250	TCVN 6200 - 1996 (ISO9280 - 1990)	A
31.	Zinc (*)	mg/l	3	TCVN 6193 - 1996 (ISO8288 - 1989)	C
32.	Permanganate	mg/l	2	TCVN 6186:1996 or ISO 8467:1993 (E)	A
II. Content of organic substances					
a. Chlorinated alkenes					
33.	Carbon tetrachloride	µg/l	2	US EPA 524.2	C
34.	Dichloromethane	µg/l	20	US EPA 524.2	C
35.	1,2 Dichloroethane	µg/l	30	US EPA 524.2	C
36.	1,1,1 - Trichloroethane	µg/l	2000	US EPA 524.2	C
37.	Vinyl chloride	µg/l	5	US EPA 524.2	C
38.	1,2 Dichloroethene	µg/l	50	US EPA 524.2	C
39.	Trichloroethene	µg/l	70	US EPA 524.2	C
40.	Tetrachloroethene	µg/l	40	US EPA 524.2	C
b. Aromatic hydrocarbons					
41.	Phenol and derivatives of Phenol	µg/l	1	SMEWW 6420 B	B
42.	Benzene	µg/l	10	US EPA 524.2	B
43.	Toluene	µg/l	700	US EPA 524.2	C
44.	Xylenes	µg/l	500	US EPA 524.2	C
45.	Ethyl benzene	µg/l	300	US EPA 524.2	C
46.	Styrene	µg/l	20	US EPA 524.2	C
47.	Benzo(a)pyrene	µg/l	0,7	US EPA 524.2	B
c. Chlorinated benzenes					
48.	Monochlorobenzene	µg/l	300	US EPA 524.2	B


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Or.	Parameter	Unit	Maximum limit	Testing method	Examination Level
49.	1,2- Dichlorobenzene	µg/l	1000	US EPA 524.2	C
50.	1,4- Dichlorobenzene	µg/l	300	US EPA 524.2	C
51.	Trichlorobenzene	µg/l	20	US EPA 524.2	C
d. Groups of complex organic substances					
52.	Di(2-ethylhexyl) adipate	µg/l	80	US EPA 525.2	C
53.	Di(2-ethylhexyl) phthalat	µg/l	8	US EPA 525.2	C
54.	Acrylamide	µg/l	0,5	US EPA 8032A	C
55.	Epichlorhydrin	µg/l	0,4	US EPA 8260A	C
56.	Hexachloro butadiene	µg/l	0,6	US EPA 524.2	C
III. Pesticides					
57.	Alachlor	µg/l	20	US EPA 525.2	C
58.	Aldicarb	µg/l	10	US EPA 531.2	C
59.	Aldrin/Dieldrin	µg/l	0,03	US EPA 525.2	C
60.	Atrazine	µg/l	2	US EPA 525.2	C
61.	Bentazone	µg/l	30	US EPA 515.4	C
62.	Carbofuran	µg/l	5	US EPA 531.2	C
63.	Chlordane	µg/l	0,2	US EPA 525.2	C
64.	Chlorotoluron	µg/l	30	US EPA 525.2	C
65.	DDT	µg/l	2	SMEWW 6410B, or SMEWW 6630 C	C
66.	1,2 - Dibromo - 3 Chloropropane	µg/l	1	US EPA 524.2	C
67.	2,4 - D	µg/l	30	US EPA 515.4	C
68.	1,2 Dichloropropane	µg/l	20	US EPA 524.2	C
69.	1,3 Dichloropropene	µg/l	20	US EPA 524.2	C
70.	Heptachlor & heptachlor epoxide	µg/l	0,03	SMEWW 6440C	C
71.	Hexachlorobenzene	µg/l	1	US EPA 8270 - D	C
72.	Isoproturon	µg/l	9	US EPA 525.2	C
73.	Lindane	µg/l	2	US EPA 8270 - D	C
74.	MCPA	µg/l	2	US EPA 555	C
75.	Methoxychlor	µg/l	20	US EPA 525.2	C
76.	Methachlor	µg/l	10	US EPA 524.2	C
77.	Molinate	µg/l	6	US EPA 525.2	C


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Or.	Parameter	Unit	Maximum limit	Testing method	Examination Level
78.	Pendimetalin	µg/l	20	US EPA 507, US EPA 8091	C
79.	Pentachlorophenol	µg/l	9	US EPA 525.2	C
80.	Permethrin	µg/l	20	US EPA 1699	C
81.	Propanil	µg/l	20	US EPA 532	C
82.	Simazine	µg/l	20	US EPA 525.2	C
83.	Trifuralin	µg/l	20	US EPA 525.2	C
84.	2,4 DB	µg/l	90	US EPA 515.4	C
85.	Dichloprop	µg/l	100	US EPA 515.4	C
86.	Fenoprop	µg/l	9	US EPA 515.4	C
87.	Mecoprop	µg/l	10	US EPA 555	C
88.	2,4,5 - T	µg/l	9	US EPA 555	C
IV. Disinfectants and disinfectant by-products					
89.	Monochloramine	µg/l	3	SMEWW 4500 - Cl G	B
90.	Chlorine residue	mg/l	Within 0,3 - 0,5	SMEWW 4500Cl or US EPA 300.1	A
91.	Bromate	µg/l	25	US EPA 300.1	C
92.	Chlorite	µg/l	200	SMEWW 4500 Cl or US EPA 300.1	C
93.	2,4,6 Trichlorophenol	µg/l	200	SMEWW 6200 or US EPA 8270 - D	C
94.	Formaldehyde	µg/l	900	SMEWW 6252 or US EPA 556	C
95.	Bromoform	µg/l	100	SMEWW 6200 or US EPA 524.2	C
96.	Dibromchlorometane	µg/l	100	SMEWW 6200 or US EPA 524.2	C
97.	Bromodichlorometane	µg/l	60	SMEWW 6200 or US EPA 524.2	C
98.	Chloroform	µg/l	200	SMEWW 6200	C
99.	Dichloroacetic acid	µg/l	50	SMEWW 6251 or US EPA 552.2	C
100.	Trichloroacetic acid	µg/l	100	SMEWW 6251 or US EPA 552.2	C
101.	Chloral hydrate (trichloroacetaldehyde)	µg/l	10	SMEWW 6252 or US EPA 8260 - B	C
102.	Dichloroacetonitrile	µg/l	90	SMEWW 6251 or US EPA 551.1	C
103.	Dibromoacetonitrile	µg/l	100	SMEWW 6251 or US	C


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Or.	Parameter	Unit	Maximum limit	Testing method	Examination Level
				EPA 551.1	
104.	Trichloroacetonitrile	µg/l	1	SMEWW 6251 or US EPA 551.1	C
105.	Cyano chlorite (as CN ⁻)	µg/l	70	SMEWW 4500J	C
V. Radioactive constituents					
106.	Gross α activity	pCi/l	3	SMEWW 7110 B	B
107.	Gross β activity	pCi/l	30	SMEWW 7110 B	B
VI. Micro-organism					
108.	Total Coliform	Bacterial/100ml	0	TCVN 6187 - 1,2 :1996 (ISO 9308 - 1,2 - 1990) or SMEWW 9222	A
109.	E.coli or thermo-tolerant coliform	Bacterial/100ml	0	TCVN6187 - 1,2 : 1996 (ISO 9308 - 1,2 - 1990) or SMEWW 9222	A

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ANNEX C – EMPLOYEE CONTACT DETAILS ASSOCIATED WITH MANAGEMENT PLAN

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Role	Responsibilities	Contact Details*
General Manager (Contractor)		<ul style="list-style-type: none"> • Mobile Number: • Email:
Senior Site Engineer (Contractor)		<ul style="list-style-type: none"> • Mobile Number: • Email:
Site Supervisor / Foreman (Contractor)		<ul style="list-style-type: none"> • Mobile Number: • Email:
Site EHS Officer (Contractor)		<ul style="list-style-type: none"> • Mobile Number: • Email:
Emergency Response Co-ordinator (Contractor)		<ul style="list-style-type: none"> • Mobile Number: • Email:
[Other]		
[Other]		

*Any change in respect to employees, the contact details will need to be amended as soon as the role has been reassigned.

[Note to Contractor: Insert a description of the responsibilities of each role, with regards to the management of EHS and Worker Occupational Health and Safety). Delete roles that are not appropriate. Include additional roles where required.]

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ANNEX D – WEEKLY REPORTING FORM

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Note to contractor: The below table provides an example of the details to be included on a Weekly Reporting Form.]

Date of Observation	Contact Details / Role of Individual Reporting the Observation	Details of Observation / Location	Mitigation Action to be Taken	Date Mitigation Action was Implemented