 PT SKS LISTRIK KALIMANTAN	Scope of Works	No SOP	SLK-KTG1-MGM-PCD-2023-0011
		Form No	SLK-KTG1-MGM-FM-2023-0011-004
	APH Tube Inspection by APRIS	Issued	13 Agustus 2023
		Rev	0

2 x 100 MW KALTENG – 1 COAL-FIRED STEAM POWER PLANT (CFSP)

Scope of Works APH Tube Inspection by APRIS Unit-1 2026



Management System
ISO 9001:2015
ISO 14001:2015
ISO 45001:2018
ISO 50001:2018
www.tuv.com
ID: 900090079



0	12.04.2026	Published	FRA	MSZ	AH
Rev.	Date	Description	Prepared By	Checked By	Approved By

Hak Cipta © 2023 Corporate System & Procedure, PT SKS Listrik Kalimantan.


Hanya untuk internal. Dilarang memperbanyak dan/atau mendistribusikan sebagian/seluruh isi dokumen ini tanpa ijin tertulis.

Only for internal. Reproduction and/or distribution of part/all content of this document without written permission are prohibited.

Paraf

Preparer

Reviewer

 PT SKS LISTRIK KALIMANTAN	Scope of Works	No SOP	SLK-KTG1-MGM-PCD-2023-0011
		Form No	SLK-KTG1-MGM-FM-2023-0011-004
	APH Tube Inspection by APRIS	Issued	13 Agustus 2023
		Rev	0

A. Location

PT SKS Listrik Kalimantan (SLK) is the owner of PLTU Kalteng-1 2x100MW located at Tumbang Kajuei Village, Rungan District, Gunung Mas Regency and Central Kalimantan. The location can be accessed by car from Tjilik Riwut Airport of Palangkaraya City for approximately 4 hours or measured distance around 200km.

B. Definition


1. Project or Work : APH Tube Inspection by APRIS
2. Owner : PT. SKS Listrik Kalimantan (“SLK”)
3. Contractor : Awarded Bidder
4. Plant or Power Plant : IPP Kalteng-1 Coal Fired Power Plant

C. Background

IPP Kalteng 1 (2x100 MW) started its commercial operation since November 2020. In mid, 2026, the unit has been approximately 5.5 years in operation. Meanwhile, in accordance with Power Purchase Agreement, IPP Kalteng will enter into high availability season since 2026 onwards, with availability factor is 85% in 2026-2029. In order to ensure Plant health during high availability season, in outage Unit-1 2026 it is planned to perform a comprehensive inspection to conducted the new technology to inspected of APH tube in boiler as critical pressure part by Acoustic Pulse Reflectometry Inspection System (APRIS) method. APRIS is an acoustic wave technology. An incident acoustic wave from one end of tube detects changes in the tube cross-section as well as signal loss due to leaks from reflected acoustic wave. These reflections are acquired and analyzed to generate tube inspection report with location and size of individual defects.

D. Scope of Work

- The Contractor shall perform to do inspection boiler tube including U/bend tube if necessary especially in APH (Air Preheater) total 3000 tubes with outer diameter 42mm X thickness 2mm x 4,57m.
- The Contractor shall perform inspection work in 3 days with expected productivity 1000 tube / day.
- The Contractor has assign certified manpower for APRIS including complete set of Equipment.
- The Contractor shall provide the report fault analysis and present about the finding and recommendation to User for corrective action.
- Owner will provide cleaning tube and validate by contractor

 PT SKS LISTRIK KALIMANTAN	Scope of Works	No SOP	SLK-KTG1-MGM-PCD-2023-0011	
		Form No	SLK-KTG1-MGM-FM-2023-0011-004	
	APH Tube Inspection by APRIS	Issued	13 Agustus 2023	
		Rev	0	

E. Miscellaneous Services

The following conditions shall be paid attention:

Temporary facility Scope		Contractor	SLK
1	Dormitory		√
2	Mob and de-mob manpower	√	
3	Mob and de-mob tools and equipment	√	
4	Meals (breakfast, lunch, dinner) and drinking water	√	
5	Local transportation for manpower, material, equipment	√	
6	Safety PPE (Note : yellow safety helmet for contractor)	√	
7	Site offices & rest shelter		√
8	Secure site - Safety Inspector facilities		√

F. Schedule

The activity must conduct at July 2026 or Outage Unit-1 schedule (Tentative will be conform by Owner)

G. Special Requirement

N/A

SURAT PERNYATAAN INTEGRITAS DAN KEPATUHAN PESERTA TENDER

TENDER INTEGRITY AND COMPLIANCE STATEMENT LETTER

Sehubungan dengan partisipasi kami dalam **Tender No. [●] mengenai [Judul Tender / Major Overhaul Project]** yang diselenggarakan oleh **PT SKS Listrik Kalimantan (“SLK”)**, kami, [Nama Perusahaan Peserta Tender] yang bertanda tangan di bawah ini selaku **peserta tender (“Peserta Tender” / “Bidder”)**, dengan ini menyatakan dan menjamin kepada SLK sebagai berikut:

In connection with our participation in **Tender No. [●] regarding [Tender Title / Major Overhaul Project]** organized by **PT SKS Listrik Kalimantan (“SLK”)**, we, [Name of the Bidding Company] the undersigned as a **tender participant (“Bidder”)**, hereby declare and warrant to SLK as follows:

1. Peserta Tender dan/atau wakil-wakilnya (termasuk namun tidak terbatas pada agen, konsultan, atau organisasi lain yang berhubungan dengan Peserta Tender) **dengan tanpa syarat, menyatakan dan menjamin bahwa Peserta Tender tidak akan menawarkan, menjanjikan, memberikan, maupun pernah memberikan keuntungan atau bujukan dalam bentuk apapun**, baik berupa uang maupun dalam bentuk lainnya, kepada karyawan SLK dan/atau anggota keluarga mereka yang dimaksudkan, baik secara langsung maupun tidak langsung, untuk menarik, membujuk, mempengaruhi secara tidak sah, menyuap, atau mempengaruhi hasil proses tender atau pengadaan yang dilakukan oleh SLK.
 2. Apabila Peserta Tender dan/atau wakil-wakilnya (termasuk namun tidak terbatas pada agen, konsultan, atau organisasi lain yang berhubungan dengan Peserta Tender) terbukti memberikan atau menawarkan keuntungan sebagaimana dimaksud dalam pernyataan ini, maka SLK secara sepihak berhak untuk:
 - 2.1 mendiskualifikasi Peserta Tender dari proses tender;
 - 2.2 membatalkan penetapan Peserta Tender sebagai pemenang tender;
 - 2.3 membatalkan atau mengakhiri kontrak yang telah diberikan; dan/atau
 - 2.4 mengambil tindakan lain yang dianggap perlu sesuai ketentuan yang berlaku.
1. The Bidder and/or its representatives (including but not limited to agents, consultants or other organizations related to the Bidder) hereby **unconditionally represent and warrant that the Bidder has not and will not offer, promise, give or provide any benefit or inducement of any kind**, whether monetary or otherwise, to any employee of SLK and/or their family members for the purpose of inducing, influencing improperly, bribing, or otherwise affecting the outcome of any tender or procurement process conducted by SLK.
 2. If the Bidder and/or its representatives (including but not limited to agents, consultants or other organizations related to the Bidder) is proven to have provided or offered such benefits, SLK at its own discretion shall have the right to:
 - 2.1 disqualify the Bidder from the tender process;
 - 2.2 revoke any award granted to the Bidder;
 - 2.3 terminate any contract that may have been awarded; and/or
 - 2.4 take any other actions deemed necessary in accordance with applicable regulations.

3. Peserta Tender menyatakan bahwa tidak terdapat **benturan kepentingan** dalam partisipasinya pada proses tender ini dengan SLK maupun dengan pihak lain yang terlibat dalam proses pengadaan. Peserta Tender juga berkewajiban untuk segera memberitahukan secara tertulis kepada SLK apabila terdapat potensi benturan kepentingan.
4. Peserta Tender menyatakan bahwa penawaran yang diajukan dibuat secara **independen** dan tidak melibatkan persekongkolan dengan peserta tender lainnya atau dengan pihak manapun.

Peserta Tender juga menjamin bahwa **tidak akan mendaftarkan atau menggunakan perusahaan lain yang merupakan anak perusahaan, afiliasi, atau berada dalam kelompok usaha yang sama** untuk mengikuti tender yang sama untuk jenis pekerjaan yang sama.

5. Peserta Tender bersedia untuk segera memberitahukan secara tertulis kepada SLK apabila terdapat karyawan SLK yang meminta atau mengisyaratkan permintaan atas keuntungan atau imbalan dalam bentuk apapun.

Peserta Tender juga bersedia untuk bekerja sama sepenuhnya dengan SLK dalam proses investigasi atau tindakan hukum yang diperlukan.

6. Peserta Tender dengan ini menjamin untuk memenuhi setiap ketentuan yang terdapat di dalam Surat Pernyataan ini, Peserta Tender juga sepenuhnya menjamin bahwa seluruh **informasi, dokumen, dan pernyataan** yang diberikan dalam proses tender adalah benar, lengkap, dan tidak menyesatkan.

3. The Bidder declares that **no conflict of interest exists** in its participation in this tender process with SLK or any party involved in the procurement process. The Bidder shall promptly notify SLK in writing if any potential conflict of interest arises.

4. The Bidder declares that its bid has been prepared **independently** and without any collusion with other bidders or any other party.

The Bidder further warrants that it will **not register or submit bids through other companies which are subsidiaries, affiliates or companies within the same business group** to participate in the same tender for the same scope of work.

5. The Bidder undertakes to promptly inform SLK in writing if any SLK employee demands or requests any benefit from the Bidder.

The Bidder further agrees to fully cooperate with SLK in any investigation or legal proceedings relating to such matter.

6. The Bidder hereby undertake to fulfill every obligations stated within this Statement Letter. Furthermore, the Bidder warrants that all **information, documents, and statements** provided in connection with the tender process are true, complete and not misleading.

Sisa halaman ini sengaja dikosongkan/The remainder of this page is intentionally left blank

Demikian pernyataan ini dibuat dengan sebenar-
benarnya untuk digunakan sebagaimana mestinya
dalam proses tender yang diselenggarakan oleh **PT
SKS Listrik Kalimantan.**

Thus, this declaration is made truthfully for the
purpose of participating in the tender process
organized by **PT SKS Listrik Kalimantan.**

Tanggal:
Dated

Signed by

Nama/Name:
Jabatan/Position:
PT.....



PT SKS LISTRIK KALIMANTAN

Appendix-3 – HSE Requirements

Package Name:

Supply Manpower & Tools for Installation, Dismantling and Transfer Scaffolding Unit-1

PT SKS Listrik Kalimantan
Desa Tumbang Kajuei, Kecamatan Rungan, Kabupaten Gunung Mas
Kalimantan Tengah 74561, Indonesia

31 Jan 2025
Revision: 0



Rev.	Date	Description	Prepared by	Checked by	Review by	Approved by
0	31 Jan 2025	First Issued	HSE	Nanang K	Jackson S	Ikhlas Mappatunru

Hak Cipta © 2023 **Corporate System & Procedure, PT SKS Listrik Kalimantan.**
Hanya untuk internal. Dilarang memperbanyak dan/atau mendistribusikan sebagian/seluruh isi dokumen ini tanpa ijin tertulis.
Only for internal. Reproduction and/or distribution of part/all content of this document without written permission are prohibited.

Paraf	Created By
	Reviewer



TABLE OF CONTENTS

1 Introduction.....5

2 contractor/SUBCONTRACTOR General HSE Requirements.....5

3 HSE Golden rules.....6

4 HSE Plan and HSE Management System Requirements.....6

4.1 General6

4.2 Roles and Responsibilities6

4.3 HSE Management.....6

4.4 Worksites.....7

4.5 HSE Staff to Worker Ratio7

4.6 HSE Reporting8

4.7 Worksite Inspections8

4.8 Instruction to Stop Work8

5 Safety Management8

5.1 HSE Training and Awareness8

5.2 HSE Signage9

5.3 Road Safety9

5.4 Personal Protective Equipment and Safety Devices/Facilities9

5.5 Illumination for Working Area10

5.6 Emergency Preparedness10

6 Health and hygiene Management 11

6.1 Substances Hazardous to Health 11

6.2 Welfare and Sanitation Provision 11

6.3 Medical and First Aid Provision 12

7 Environmental Management12

7.1 Contractor’s/Subcontractor’s Worksites..... 12

7.2 Waste Management Plan 12

8 Equipment And Operating Standards..... 13

8.1	Tools and Equipment.....	13
8.2	Abrasive Wheels (Including Portable Grinders)	14
8.3	Diesel Engine Driven Pumps, Compressors, Welding Set, Etc.	14
8.4	Electrical Power Portable Tools And Equipment	14
8.5	Hand Tools	15
8.6	Crane, Over Head Crane, Hoist Crane	15
8.7	Lifting Appliances and Loose Lifting Tackle.....	16
8.8	Scaffolding and Access	16
8.9	Working at Height	17
8.10	Hot Work Activity	17
8.11	Pressurize Gas Cylinder	17
9	Security Management.....	18
9.1	Security	18
10	Verification and Audit	18
10.1	Observed Deficiencies	18
10.2	Punishment	19
10.3	Disciplinary Action.....	19



1 INTRODUCTION

The Contractor/Subcontractor shall have full responsibility for the adequacy of and comply with any and all HSE requirements particularly of the Owner (hereinafter "CLIENT") and rules and regulations and/or instructions in conjunction with his performance of the work.

The Contractor/Subcontractor shall perform, provide and supply all safety equipment required in the scope of work for the Health Safety and Environment. To protect all property and employees on site to satisfy all HSE condition set forth in the CLIENT HSE Regulations for Contractor along with client procedure and other regulations required when and where necessary. To protect all personnel on CLIENT operation and project sites from harm by issuing all appropriate protective equipment to their work force, and to maintain good safety practices and safety conditions.

2 CONTRACTOR/SUBCONTRACTOR GENERAL HSE REQUIREMENTS

The Contractor/Subcontractor general HSE requirements are listed but not limited to;

- a. Participating in the CLIENT's and/or HSE Induction course and specialize training.
- b. Participating in SLK HSE committee and designated meeting
- c. Conducting the necessary and appropriate HSE training and education including regular tool box meeting and keeping the records to their own personnel
- d. Supervising all personnel assigned at the Site to ensure that they abide by HSE rules and regulations.
- e. Supplying necessary personal protective equipment, device and facilities.
- f. Running routine checks on the Subcontractor's own first aid and medical facilities to ensure adequacy of supplies and services, if any
- g. Conducting regular and periodical site inspection
- h. Reporting the results of site inspections and its remedial actions and measures taken
- i. Reporting regular HSE performance including the Contractor's/Subcontractor's manpower
- j. The Contractor's/Subcontractor shall immediately, without any delay, report to client any and all accidents, death and/or injuries to any person whatsoever, fire, explosion, any loss or damage to any part of the Work, the Plant and/or the Construction equipment



3 HSE GOLDEN RULES

The Contractor/Subcontractor shall be follow HSE Golden Rules from the Owner are listed but not limited to;

- a. It is prohibited of working before indentify the hazards.
- b. It is prohibited of working if no supervisor the job
- c. It is prohibited of working using portable electrical equipment without any inspection
- d. It is prohibited of working at height more than 1.8 meters without full body harness and fall protection
- e. It is prohibited of working without work permit
- f. It is prohibited of operating heavy equipment without SIO (Operator License)
- g. It is prohibited of consuming drugs and alcohol
- h. It is prohibited of smoking except in designated smoking area
- i. It is prohibited of working in confined space without buddy system
- j. It is prohibited of removing LOTO without authority
- k. It is prohibited of operating company vehicles without authority at working area.

4 HSE PLAN AND HSE MANAGEMENT SYSTEM REQUIREMENTS

4.1 General

- 4.1.1 The Contractor/Subcontractor shall perform its work under its HSE Plan and in accordance with the Contractual Agreement and of Owner HSE requirements.
- 4.1.2 The HSE Plan shall be adequately documented and shown to be effective in implementing the aims and objectives of the Contractor's/Subcontractor in HSE Management.

4.2 Roles and Responsibilities

- 4.2.1 The Contractor's/Subcontractor shall be responsible for the health, safety and security of all Personnel employed on the Worksites that are under its direct control, whether they are direct employees, employees of its Contractor's/Subcontractors or employees of other companies working on its Worksite and for all visitors.
- 4.2.2 In details Contractor's/Subcontractor shall:
 - a. Comply with the requirements of Owner HSE rules and regulations
 - b. Manage HSE matters as top priority and critical business activity
 - c. Pursue ZERO accident goals and ZERO Environmental Incident.
 - d. Provide Project Specific HSE Plan and Procedures.

4.3 HSE Management

- 4.3.1 The Contractor's/Subcontractor shall nominate competent HSE personnel who shall be responsible for maintaining communications and key interfaces to Owner HSE Manager on HSE matters. The competent person shall also be responsible for



Appendix-3 HSE Requirements

ensuring any HSE incident which takes place during the performance of the Contractor's/Subcontractor is fully investigated in a timely manner and all findings of the investigation are provided to Owner HSE Manager.

- 4.3.2 The Contractors/Subcontractor personnel shall be familiar with the actions required in an emergency and participate in all drills conducted at Owner Power Plant Site.
- 4.3.3 The Contractor's/Subcontractor shall have appropriate HSE-related plans and procedures in effect for all the Contractor/Subcontractor personnel during the entire time that any of the Contractor/Subcontractor personnel are on SLK power plant Site, wherever located. The plans and procedures shall address and clearly declare accountability for the Contractor/Subcontractor.

4.4 Worksites

- 4.4.1 The Contractor/Subcontractor shall ensure that all its personnel are fully conversant with the working conditions at each worksite. This shall include the rules and standards related to the working environment and the hazards and risks associated with performing the work at any worksite.
- 4.4.2 The Contractor/Subcontractor shall ensure that all its personnel are fully aware that they are expected to bring to the immediate notice of their immediate supervisor all health, safety, security and environmental risks which they believe not to be under adequate control, so that action may be taken to prevent injuries or other losses and provide a healthy, safe and secured workplace. It should be clear that all personnel have the right to stop any of the work that they consider unsafe.
- 4.4.3 The Contractor/Subcontractor shall make sure that all their visitors, suppliers and vendors are only allowed to enter or access the site with or without their vehicles on final approval of SLK HSE Department, and all those visitors are obliged to wear their appropriate PPE while at the worksites.
- 4.4.4 The Contractors/Subcontractor shall be responsible for providing the appropriate level of training to all of its personnel to ensure that the HSE requirements can be achieved for all worksites.

4.5 HSE Staff to Worker Ratio

- 4.5.1 For services involving greater than 50 but less than 70 Contractor/Subcontractor personnel onsite, Contractor/Subcontractor shall provide a fulltime, experienced (minimum of three years safety experience) "Site HSE Officer" to enforce SLK HSE requirements.
- 4.5.2 For services involving greater than 50 Contractor/Subcontractor personnel onsite, Contractor/Subcontractor shall provide one fulltime experienced "Site HSE Officer" for each 50 individuals to monitor SLK HSE requirements. Contractor/Subcontractor shall nominate a fulltime and experienced "Senior Site HSE Representative" (Manager / Engineer / Supervisor) when Contractor or its Subcontractor totals exceed 200 who shall have overall responsibility for each of the site HSE representatives and HSE requirements.
- 4.5.3 The ratio of HSE Staff to Workers are subjected to change as per Owner requirements



4.6 HSE Reporting

The Contractor/Subcontractor shall submit report to SLK HSE Department the HSE status of the work via the Daily, weekly/monthly report. The detail level of Daily, weekly/monthly HSE reporting shall be agreed between SLK HSE Department before commencement of any part of the Work.

4.7 Worksite Inspections

4.7.1 The Contractor/Subcontractor shall ensure that regular management inspections of the worksites are carried out to observe and respond to unsafe acts and conditions.

4.7.2 The Contractor/Subcontractor shall implement a system for regular inspection (color coding), testing and commissioning of equipment of all its worksites to verify that they are safe for all of the planned work to be carried out.

4.8 Instruction to Stop Work

If SLK is made aware of the Contractor/Subcontractor performing (or intending to perform) an activity that is unsafe, pose a risk of injury or death or hazard or unacceptable impact to the environment, health and well-being of the personnel, SLK shall have the right to notify the Contractor/Subcontractor of same and to direct the Contractor/Subcontractor to stop such activity. The Contractor/Subcontractor shall not recommence the affected activity until proper measures to solve the issue and an agreement in writing from SLK HSE Department Head has been received. All cost involved with the stoppage shall be for the Contractor/Subcontractor account. Time lost as a consequence of any such stoppage shall not excuse the Contractor/Subcontractor from its obligation to complete the work in accordance with the requirements of the Sub-Contract.

5 SAFETY MANAGEMENT

In addition to the foregoing, the Contractor/Subcontractor shall implement project specific safety management measures in accordance with SLK HSE Requirements and to ISO 45001:2018 OHS Management System, ISO 14001:2015 Environmental Management System and in compliance to relevant local laws and regulations to include the following SMK2 and SMK3.

5.1 HSE Training and Awareness

5.1.1 All site personnel including visitors, suppliers and vendors must undergo HSE induction training to be conducted by SLK HSE Department or his authorized representative before they commence work on power plant. Access to site shall be denied to those who have not been inducted.

5.1.2 The Contractor/Subcontractor shall ensure that all its Managers, Engineers, Supervisors, Foreman including those of its Subcontractors are trained in HSE Management.

5.1.3 The Contractor/Subcontractor shall be responsible for identifying any trade and skill training (Specialized Training) which may be required for the performance of the work



e.g. Confined Space, Working at Heights, Lifting and Rigging, Hot work etc.

5.1.4 The Contractor/Subcontractor shall ensure that all their workers are competent in their assigned task and attend to their own specialized training conducted competent HSE Training Instructor or third party Training institution.

5.2 HSE Signage

5.2.1 SLK will install appropriate HSE informative signs in various strategic location of the power plant site..

5.2.2 The Contractor/Subcontractor shall install appropriate bilingual (English – Local) HSE informative signs, board, banners charts and other items wherever and whenever required or asked by SLK including temporary barricades and warning tapes.

5.3 Road Safety

5.3.1 The Subcontractors shall make sure that all its vehicle drivers and heavy equipment operators are in good health and shall have a valid license for driving & operating those equipment issued by Local Government and all heavy equipment operators e.g. Forklift, Crane, Boom Truck, Loader, etc. shall have a 3rd Party competency certificate along with the heavy equipment operator’s license. These evidences shall be furnished to SLK HSE office prior to mobilization of operators and drivers at the project site.

5.3.2 Along with the above requirements, prior to issuance of entry pass at the power plant site, Contractor/Subcontractor are required to get their equipment inspected by SLK HSE staff for approval to entry. And provide as a minimum, the following evidence of those vehicle’s/equipment;

- a. 3rd Party Certificate of Inspection
- b. Certificate of Registration from local authority
- c. Copy of Insurance & Ownership
- d. Previous inspection and maintenance record

5.4 Personal Protective Equipment and Safety Devices/Facilities

5.4.1 Contractor/Subcontractor shall provide appropriate PPE for its personnel and visitors in accordance with the hazards and risk of the work and in compliance with recognized international standard

5.4.2 The Contractor/Subcontractor shall ensure that its personnel always wear the appropriate PPE required for the type of work being carried out.

5.4.3 The Contractor/Subcontractor shall ensure his employees understand the need for PPE and safety devices/facilities are provided with necessary instruction and training in its correct use.

5.4.4 The Contractor/Subcontractor shall replace free of charge to the employee, any PPE and safety devices/facilities which becomes defective/deficient in any way through normal work usage or wear and tear, such that all times the workers has adequate protection.

5.4.5 If Contractor/Subcontractor cannot follow HSE regulations, SLK can provide



appropriate adequate personal protective equipment and device/facilities to Contractor/Subcontractor based on SLK’s own discretion, and all expenses shall be deducted from Contractor/Subcontractor’s payment.

5.4.6 Prior to commencement of project, any costs related to safety shall be included in contract or quotation. In case of unexpected costs occur, Contractor/subcontractor shall discuss it with SLK in advance prior to its implementation or execution.

The requirement Personal Protective Equipment such as a mention below:

1. Contractor shall comply with SLK PPE Standard. Required PPE including but not limited to:
 - Safety Helmet complete with company logo, Chin strap, with yellow colour (Safety Helmet Not expired)
 - Uniform with reflector
 - Safety shoes with steel cap toe and good condition
 - Additional high visibility vest shall be wearing if working at coal yard area
 - Specific PPE Full body Harness shall be double lanyard and completed with absorber.
2. Contractor shall provide required additional specific PPE, which decided, based on risk assessment.
3. Contractor shall provide PPE to their entire employee and maintain their PPE stock 10% more than manpower planning.
4. All PPE shall be Inspected by SLK prior to use

5.5 Illumination for Working Area

5.5.1 The Contractor/Subcontractor shall provide suitable and sufficient temporary illumination and emergency lighting for maintaining safe working conditions for all areas requiring access including platforms, under platforms, underpasses, excavations, etc. and shall be in accordance with the relevant legislation (International and Local).

5.5.2 The Contractor/Subcontractor shall provide temporary general illumination with a lighting level of not less than 75 LUX. Where work is performed in areas with insufficient lighting, suitable floodlights shall be provided, to include fixed and portable lighting, to enable work to be carried out safely.

5.5.3 An adequate number of lamps shall be located at the work area.

5.5.4 The contractor / sub contractor shall implement ISO 50001 energy management system by implementing energy conservation in selecting electrical devices.

5.6 Emergency Preparedness

5.6.1 SLK will establish the Site Emergency Response Plan for the project. The Contractor/Subcontractor shall submit site specific Emergency Response Plan to SLK for approval within 30days of contract effective date. The basic and essential features of any emergency plan/procedures includes:

- a. Establishment and maintain effective communications to SLK HSE Department which includes Local Government Units such as Fire Station, Police Department and Emergency Response Services.



- b. Appointment of Emergency Response Team (ERT) personnel and specifying their duties and responsibility.
- c. Emergency Response and action items for various that incident that could happen during the Project such as but not limited to;
 - Work site accidents including severe injuries and fatalities
 - Facility Emergencies such as fire, explosion, toxic gas leakage, hazardous material spillage etc.
 - Road Traffic Accident (RTA) Utility Failure (telephone, water, gas, electricity)
 - Fire in workers camps/accommodation
 - Workplace Violence, Criminal Activities, intentional sabotage or civil disturbances
 - Electrical shock
 - Working at height incidents
- d. Testing and maintenance of emergency response equipment (fire extinguisher, fire alarm system, etc.)
- e. Training and drills (table top exercise, actual/practical training, evacuation)
- f. Designation of evacuation plan and muster/assembly areas.

5.6.2 The Subcontractor shall provide necessary equipment in case of fire, personal injury, damage to property, chemical spill and so on.

6 HEALTH AND HYGIENE MANAGEMENT

6.1 Substances Hazardous to Health

- 6.1.1 The Contractor/Subcontractor shall ensure that all hazardous substances supplied or used must have relevant and up to date MSDS (Material Safety Data Sheets) or GHS(Globally Harmonized System of Classification and Labelling of Chemicals) and safety assessments are conducted relating to any substance that may be hazardous to health or to the environment and adequate controls are put in place.
- 6.1.2 The Subcontractor shall give copy of MSDS to SLK HSE Department or any related documents for all hazardous chemical that will be utilized at the worksite.
- 6.1.3 The Subcontractor shall provide proper storage area for all Hazardous chemical and all personnel shall be familiar and trained with its characteristic and emergency response.

6.2 Welfare and Sanitation Provision

The Contractor/Subcontractor shall provide suitable and sufficient welfare facilities on site which are readily accessible taking into account the number and distribution of workers throughout its entire work site. These facilities shall include:

- a. Drinking station with supply of adequate clean drinking water. Drinking water must meet the criteria for all personnel to drink. Common drinking cups or dips are prohibited.
- b. Sheltered rest areas, to include seating, segregated from the worksite so that workers may safely remove helmets and other items of PPE. Such rest areas shall have sufficient waste bins. Such location must be away from SLK Process Area, properly equipped with shelter and signs posted.
- c. Where necessary safe smoking area must be provided with the approval of SLK



Management.

6.3 Medical and First Aid Provision

- 6.3.1 All Contractor/Subcontractor employee shall be passed medical fitness to work from doctor before working at worksite. The record medical fitness to work shall submitted to SLK
- 6.3.2 The Contractor/Subcontractor shall provide trained first aid personnel and maintain first aid box/kits to give effective first aid to cover its work site. Where work is to be carried out during extended hours or on a shift system. The Contractor/Subcontractor shall ensure that there are sufficient trained first aider personnel on work site to give effective cover at all hours.
- 6.3.3 The Contractor/Subcontractor shall ensure proper medical evacuation of personnel suffers serious injury that needs further medical treatment to the nearest hospital/medical facilities.
- 6.3.4 The Contractor/Subcontractor shall ensure compliance with medical insurance (BPJS Ketenaga Kerjaan) of all their workers and staff at site according to local regulations from relevant government organization or local laws, the records shall be available to SLK on request.

7 ENVIRONMENTAL MANAGEMENT

7.1 Contractor's/Subcontractor's Worksites

- 7.1.1 The Contractor/Subcontractor shall develop, implement and submit to SLK for approval its own Environmental Management Plan within 30 days of contract effective date in accordance with SLK Environmental Management System and to International Standards Organization ISO 14001:2015 and in compliance to relevant local laws and regulations.
- 7.1.2 The Contractor/Subcontractor main responsibility in environmental management are;
 - a. Manage the operation in a way that ensures continual improvement in environmental performance and compliance with legislation.
 - b. Identify all potential hazards associated with the execution of the project such as dust, noise, light, odors, working hours and general disruption on the local community and to develop prevention, control and mitigation measures to eliminate or minimize harm to people, damage to plant or equipment or adverse impact on the environment.
 - c. Assess any relevant task to ensure adequate controls are in place to minimize the impact of hazardous substances on individuals and to protect the environment.

7.2 Waste Management Plan

The Contractor/Subcontractor shall develop, implement and submit to SLK for approval its own Waste Management Plan within 30 days of contract effective date for all waste created as a direct result of its operation. In particular the Subcontractor must:



- a. Ensure good housekeeping is maintained throughout the duration of the work.
- b. Minimize the environmental impact of chemicals through correct storage, deployment and disposal;
- c. Manage all waste according to the following hierarchy: eliminate where possible, reduce at source, reduce, reuse, recycle (3R) and dispose. Disposal shall be in accordance with “duty of care” principles and disposal records shall be maintained by the Contractor/Subcontractor and available for audit by SLK.
- d. Contractor shall sort the type of waste; organic waste, anorganic waste and hazardous waste.

8 Equipment And Operating Standards

For the following items, Contractor/Subcontractor shall approved SLK operational standards which shall be used during the performance of the Services. The following descriptions are intended as minimum guidelines to be used in assessing these standards. Upon Contractor’s agreement of the standards, they shall be included as Attachments to this document and covered in a bridging document that links the Contractor and Subcontractor standards and procedures. The Contractor/Subcontractor shall apply such agreed standards through out the course of the Services. Equipment proposed for the Services shall be subject to Client pre- mobilization inspection and Client shall reject and require the replacement of any equipment it deemed unfit, unsafe or inadequate for the Services.

8.1 Tools and Equipment

All Contractor and Subcontractor equipment and tools shall only be operated by competent personnel.

Contractor/Subcontractor shall ensure that all machinery, equipment, facilities, and other items associated with or utilized in the Services are maintained in a safe, sound and proper condition, and comply with laws, regulations, and the Client requirement.

Contractor/Subcontractor shall ensure that all tools and equipment and temporary facilities and other items used in the Services, whether purchased, rented or other wise provided by Contractor/Subcontractor are in a safe, sound and good condition and are capable of performing the function for which they are intended.

Contractor/Subcontractor shall ensure that all rotating or moving parts of all tools and equipment are adequately guarded to prevent accidental contact by personnel. Every power-driven machine should be provided with adequate means, immediately accessible and readily identify able to the operator of stopping it quickly, and preventing it being started again.



8.2 Abrasive Wheels (Including Portable Grinders)

Contractor/Subcontractor shall ensure that safety protection in the form of goggles and/or shields are provided and utilized by the personnel working with grinding machines and/or abrasive wheels.

Contractor/Subcontractor shall ensure that only trained and competent personnel are permitted to carry out grinding work and change out discs on portable grinders. When changing discs on a portable grinder, it is imperative that a suitable replacement disc is fitted and in the correct manner.

Contractor/Subcontractor shall maintain a complete and current list of such authorized and competent personnel. Contractor/Subcontractor shall make the list available to Client when required.

8.3 Diesel Engine Driven Pumps, Compressors, Welding Set, Etc.

Diesel engine driven pumps, compressors, welding sets, and any other diesel engine driven equipment must be located in a safe area. If such equipment is to be used in hazardous area, Subcontractor shall ensure the equipment complies fully with EEMUA 107 requirements (Recommendations for the Protection of Diesel Engines Operating in Hazardous Areas). Any such equipment must be well maintained and in good operational order and prior to use maybe inspected by Client Representative.

8.4 Electrical Power Portable Tools And Equipment

Contractor/Subcontractor shall implement ISO 50001-2018 Energy management system.

Contractor/Subcontractor shall ensure only trained and competent personnel shall use portable electrically powered tools and equipment, waterproof socket and terminal.

Contractor/Subcontractor shall ensure that all portable equipment is disconnected from the power supply when not in use. All flexible cables shall be in good and safe working condition. Taped joints in cables shall not be permitted.

Contractor/Subcontractor shall have a written procedure for checking and maintaining portable electrically powered hand tools and equipment in place. Any defective electrical tool and equipment shall be immediately prohibited from further use until it has been satisfactorily repaired. Defective items which are no longer service able shall be removed from storage or use and scrapped. Cable and the connection shall be similar type.

Contractor/Subcontractor shall maintain accurate records regarding the

Created By
Reviewer



maintenance and disposal of such equipment. The Subcontractor shall appoint a person(s) to be responsible for such maintenance. All Electrical power portable tools and equipment shall be passed inspection from the Client.

The Electrical power portable tools and equipment shall be follow requirement such as mention below:

- a. No modification allowed for all electrical equipment unless by certified personnel
- b. Out of service, electrical tools/equipment shall be tagged with out of service tag or danger tag.
- c. Any electrical equipment shall be pass SLK inspection after modification or maintenance
- d. Electrical cable not allowed laying in open water and should be lay up (suspended above head)
- e. All electrical appliances shall pass SLK Inspection
- f. All electrical panel shall provide with ELCB (as much as possible using 30mA)
- g. All electrical panel and power sources should be provide with proper grounding
- h. Hand and power tools such as Grinding Machine shall have Dead Man Switch
- i. LOTO devices should be provided and implemented as SLK LOTO Procedure

8.5 Hand Tools

Contractor/Subcontractor shall ensure that all tools supplied are in good condition and fit for their intended use. Damaged tools which are unfit for use must be removed from service immediately and if they can not be repaired, they must be scrapped. Inspection should be conducted monthly, inspected by competent person.

8.6 Crane, Over Head Crane, Hoist Crane

All cranes used shall have a valid equipment operating license (SILO) and operators shall also have a valid operator license (SIO) and must be in accordance with the class / type of crane used. Cranes should be checked periodically and reports are made.

The Lifting Rigging shall be follow requirement such as follows:

- a. All lifting works will require a lifting plan for approval prior to performing the lift.
- b. If the lift is over than 50 tons or classified as critical (exceeding 80 % of crane capacity chart), the Contractors/Subcontractor shall submit detailed rigging plan with all applicable supporting calculations to Owner for approval prior to the lift.
- c. Qualified rigger and signal man shall have valid KEMENAKER certificate



8.7 Lifting Appliances and Loose Lifting Tackle

Contractor/Subcontractor shall ensure that any lifting appliances shall, be load tested, inspected by a qualified certifying person in accordance with government regulation prior to mobilization. In addition to these items being inspected before use, they shall be subjected to a six (6) monthly inspection by a third party or by a person trained and duly authorized in writing to be competent to inspect lifting appliances. All Lifting appliances or rigging tools shall be passed inspected from the client.

Safe Working Load (SWL) and radius charts shall be available for all lifting equipment and shall be marked on the equipment. Contractor/Subcontractor shall note its responsibilities to ensure the safety of the lifting appliances for the duration of this Contract.

8.8 Scaffolding and Access

All work performed at height of over 1.8 Meter above ground or deck or permanent access platform level or if a pre job risks assessment identifies a hazardous situation/activity that requires this type of mitigation (i.e. working overboard), shall be executed from suitable means of access. This will require the use of ladders and/or scaffolding dependent on the nature of the work. Where scaffold materials are used they shall be clean and corrosion free and free of incipient faults.

Scaffold boards will be free from twists and splits and will not be painted. Scaffolding, when required, will only be erected by persons who have received training in scaffolding and are deemed competent person by Contractor by virtue of this training and a physical assessment of their capabilities and inspected and tagged by Certified Inspector/Supervisor Scaffolding, completed with toe board, middle and top handrail, and no gap for platform. Refer to Ministry of Manpower Labor Republic of Indonesia regulation No. 9 year 2016 about Safety Work at Height.

Contractor/Subcontractor scaffolding installation shall follow requirement as follows:

1. Only Contractor and Sub-contractors Personnel trained and certified as competent in scaffold erection may erect, modify, or dismantle scaffolds.
2. Scaffold Material shall be galvanized, not rusted, bended/damage as JIS standard (diameter 48.3 mm, thickness 2.4 mm - 4 mm)
3. Scaffolding structure shall use 1 standard material (Can not be mixed)
4. Scaffolding type: Tube
5. The scaffold group / team consist:
 - shall be lead by 1 certified Scaffolding Supervisor (KEMENAKER),



- certified scaffolder (KEMENAKER)
 - helper (certificate not required)
6. Frame type scaffolding is prohibited.
 7. The supervisor of the crew working on the scaffold will be responsible for maintaining a clean scaffold work area and clear access.
 8. Scaffolding decks must be constructed from metal plank
 9. An SRL (Self-retracting lifelines) will be used even if the potentially hazardous fall condition exists even if the entire fall distance is less than 1.8 m (i.e. exposed rotating equipment in use, etc.). If this type of potential hazard cannot be mitigated then an SRL may be required.

8.9 Working at Height

All work performed at a height of over 1.8 Meters (or where there is a risk of fall) shall require fall protection. Contractor/Subcontractor must ensure that the members of the Contractor/Subcontractor Group required to work at height are trained in safe work at height practices. Contractor/Subcontractors must ensure that fall restraint and fall protection equipment is provided for all work at height, and that this equipment is inspected and in a safe operable condition. Full Body Harness should be double lanyard, for >6 meters should be equipped with shock absorber following Government Regulations, Ministry of Manpower Labor Republic of Indonesia regulation No. 9 year 2016 about Occupational Health and Safety of Working at Height.

Fall protection equipment must be inspected for wear and damage, and have a current inspection tag from an authorized inspector. Every time before doing high-level work there must be an inspection from the relevant team or competent to ensure safe conditions for work.

8.10 Hot Work Activity

Contractor/Subcontractor performed hot wok activity (Welding, Grinding.Etc). The Contractor/Subcontractor shall be follow requirement such as mention below:

- a. Identified the risk of fire or explosion and mitigate before execution the work.
- b. Applying permit to work system and approve from authorized Personnel before execution the work
- c. Trained personnel hot work activity
- d. Standby fire watch during performed the hot work and ensure no hot sourced before leaving the work site.
- e. Removed the flammable material before hot work activity
- f. Provide fire blanket to prevent spark spread to other site.
- g. Stand by fire extinguisher nearest the hot work activity

8.11 Pressurize Gas Cylinder

Contractor/Subcontractor shall be follow the pressurize gas cylinder requirement as a mention below:

- a. All pressurized cylinder shall be stand in cage, tied off / chained, upright position, flammable gasses sign in place.



Appendix-3 HSE Requirements

- b. Contractor shall provide adequate number of cylinder cradle/ trolley
- c. Contractor shall provide Flashback arrestor both side for all flammable & oxygen gasses connection
- d. All Gas Cylinders must have a trolley for mobilization, shelves during use in the project site, secure with chains and in an upright position
- e. Every time using of Oxygen & acetylene/ LPG shall be completed with Fire Extinguisher.
- f. Pressure vessel with working pressure 1 kg/cm² or more shall meet requirement of applicable Indonesia regulation (Regulation of Minister of Manpower No. 37, 2016 – About Occupational Safety and Health of Pressure Vessels and Storage Tanks), as minimum
- g. Cylinders color code should in accordance with Ministry of Manpower No 37, 2016 regarding pressure vessel and storage tank
- h. all Cylinders shall be leak test before use
- i. Oxygen and acetylene cylinder shall be stored separately. A minimum distance of 6 meter or 2 meter with flame-proof wall.
- j. Cylinders shall be stored in areas away from operation activities in conspicuously marked racks indicating type of gas and whether cylinder is full or empty.
- k. Wheeled carts or racks with fork skids shall be used to transport cylinders. Cylinders cannot be transported manually.
- l. Check valves shall be installed on all cutting torches. Flash arrestors shall be installed on the downstream side of oxygen and fuel gas regulators as well as at the hand torch itself, to which the appropriate hoses will be attached.
- m. Appropriate hoses and fittings shall be purchased for the type of fuel gas utilized

9 Security Management

9.1 Security

9.1.1 SLK will establish Security Plan for the project

9.1.2 The Contractor/Subcontractor in coordination with SLK security to ensure safeguard their tools, materials, equipment vehicle and facilities from any threat, damage or theft of properties.

10 Verification and Audit

10.1 Observed Deficiencies

In the event that SLK observes any deficiencies in the Contractor/Subcontractor compliance with the HSE requirements defined herein, SLK will notify the Contractor/Subcontractor, and the Contractor/Subcontractor shall immediately make corrective action to the noted deficiencies. In case that Contractor/Subcontractor fails to make corrective action to any deficiencies, SLK can suspend the Contractor/Subcontractor performance of services or any part thereof until such time as the Contractor/Subcontractor is in full compliance with the terms of this agreement.



Appendix-3 HSE Requirements

No standby charges or other charges shall be applicable during the suspension. All costs incurred by the Contractor/Subcontractor during or as a result of such suspension shall be for the Contractor/Subcontractor account.

10.2 Punishment

Contractor/Subcontractor If there is a case of death and LTI caused by a worker from Contractor, and then the contractor will be excluded from the project and not allowed to take part in the tender process in SLK for 2 years.

Contractor/Sub contractor should follow SLK Golden Rules, and SLK rules. Such as if smoking not in smoking area will punish with penalty IDR 1.000.000.

10.3 Disciplinary Action

All employees in the project shall comply with SLK HSE rules and regulations for the Project.

Any employees who violate HSE work practices and procedures repeatedly or seriously will be removed from the project/worksites.