

Schedule 4 HSE Requirements for Contracts - Mode 2

1. HSE Requirements – All Contractors

1.1 Leadership and Planning

HSE Policy	Contractor must maintain and implement a HSE policy that is aligned with Santos HSE policy and demonstrates commitment to the protection of people, the environment and operating assets.
HSE Planning	<p>Contractor must demonstrate its commitment through scope specific HSE Management Plan (HSEMP) how it will meet the requirements and must include the following elements at a minimum:</p> <ul style="list-style-type: none">+ A description of the Contractor's HSE management system and documented processes and procedures to identify, assess and manage HSE hazards and risks.+ The HSEMP must include a description of the Contractor's HSE organisation, procedures and methods of communication; and address any gaps or inconsistencies between the Contractor's HSE management system and the Santos Management System.+ Where required by regulation and/or risk assessment, the Contractor will prepare Interface / Bridging Documents or equivalent to interface their management system to applicable Santos Safety Cases, Environment Plans and Emergency Response Plans.+ Alignment with Santos' Life Saving Rules+ Contractor may elect to develop and implement a separate Construction, Installation and Pre-commissioning HSEMP.+ Additional work-package specific HSE plans to supplement the primary HSEMP, must be developed as required. <p>The Contractor must be responsible to plan, execute, and monitor the progress during regular interface meetings with Santos.</p> <p>Any changes to the reviewed HSEMP and requirements will require prior consultation with and acceptance from Santos.</p>
Document Structure	<p>The document has been structured in three sections:</p> <ul style="list-style-type: none">• Section 1 describes the minimum requirements for all contractors.• Section 2 describes additional requirements for onshore specific SOW• Section 3 describes additional requirements for offshore specific SOW

1.2 People

Overview	Contractor to ensure adequate resources are provided to ensure safe execution of Scope of Work (SOW). The Contractor must also ensure that all personnel including subcontractors, are skilled and qualified to perform the SOW and that they are properly managed.
Roles and Responsibilities	<p>All personnel are responsible for ensuring that they, and the persons performing work for them, adhere to the HSE requirements within their area of responsibility.</p> <p>The Contractor must have systems in place which define roles and responsibilities. This includes a current organisational chart that outlines the health, safety and environment structure and hierarchy of responsibilities, accountabilities and reporting channels.</p>
Supervisor HSE Awareness & Training	Contractor must ensure that their supervisors are familiar with HSE aspects of all work under their supervision. Contractor must also provide appropriate HSE training to its supervisory staff.
Training and Competency	<p>Contractor must ensure that all Contractor's personnel have been given the necessary HSE related training including training under Contractor's own HSE management systems and procedures which must align with all guidelines and/or operating standards provided by Contractor to Santos.</p> <p>All Contractor individuals undertaking work at a Santos site or accessing Santos Systems must complete the Santos Code of Conduct training.</p> <p>This training must be defined in the Contractors training matrix and tracked within an auditable compliance training management system or equivalent.</p> <p>Contractor is also responsible for identifying necessary training (including common industry inductions) and verifying that all members of Contractor Group are properly prepared to perform the SOW.</p>
Verification of Competency	<p>Contractor must have in place a verification of competency (VOC) process for any personnel conducting High Risk Work License activities, operating Mobile Plant or as described in the Santos accepted Contractors HSEMP.</p> <p>VOC certification should be conducted at appropriate intervals, to ensure personnel are up to date with new industry regulations, workplace safety standards, and any new technology or policies related to the industry and job role. Note: Santos may also require VOC for other activities as required.</p>
Inductions	Where applicable to the SOW, Santos HSE inductions must be completed by all Contractor personnel.
Contractors System for Managing Subcontractors	<p>Contractor must have in place appropriate formal systems, procedures and safe practices for the management and control of subcontractors.</p> <p>Santos Contractors who are engaged to perform actual work for Santos, cannot be engaged through a Santos approved contractor as a sub-contractor either to expedite or bypass the Contractor HSE management procedure.</p>

1.3 Workforce Involvement and Communication

Workforce Empowerment and Involvement	Contractor will be required to communicate and consult with its workforce on a regular basis on HSE matters. All personnel must understand that they have the right to stop work when they consider it unsafe to continue.
HSE Communication & Sharing	<p>Contractor must ensure that a structured method is implemented to communicate safety alerts, incident lessons learned, and best practices in HSE to Contractor's Personnel in a timely manner.</p> <p>Santos will use ISN portal to communicate HSE alerts and other relevant HSE information. For non-subscribed ISN contractors the Santos Supply Chain Portal and other agreed methods (weekly meetings, pre-start meetings, emails etc.) will be utilised.</p>
Supervisor Requirements for Communication	Contractor must ensure that their supervisors are familiar with HSE aspects of all work under their supervision and communicate this information with others. Supervisors must also provide instructions to their workforce via facilitating HSE meetings, pre-start meetings etc.

1.4 Hazard Identification, Risk Assessment and Control

Pre-Mobilisation Risk Assessment	<p>Prior to the commencement of the Work, the Contractor must demonstrate to the satisfaction of Santos that the Contractor has performed a detailed HSE hazard and risk assessment of the Work to be undertaken.</p> <p>The Contractor:</p> <ul style="list-style-type: none">+ Must ensure the assessment evaluates all hazards and risks associated with the SOW+ Must ensure any actions arising from risk assessment is formally closed out prior to execution of SOW+ Must maintain a detailed hazard register that is relevant to the contracted work scope and list any additional controls in place to manage residual risk to As Low AS Reasonably Practicable (ALARP).+ Must monitor HSE hazards and update risk assessments and hazard registers as necessary during the term of the Contract.+ May be required to attend or conduct additional Santos risk assessments in relation to planned work activities in which they will be involved.
HSE Workshops	Contractor must hold necessary workshops (HAZID/ENVID/HAZOP/LOPA/Bowties etc), as required and as applicable to the SOW with Santos and Contractor Personnel involvement. Once completed updates to all relevant documentation for example this may include HSE Management Plans; Contract HSE Risk Register; Bridging Document (if required); Work Party Interaction Tool (if required).
Santos Life Saving Rules	Contractor is to demonstrate alignment with Santos' LSRs in the Contractor's HSEMP
Lifting Equipment	All lifting and lifted equipment to be used must conform to industry accepted standards. The Contractor must provide evidence that lifting and lifted equipment certification and inspection requirements are met before the equipment is used to conduct the work.

Copies of all tests, inspection reports (including MPI as appropriate) and maintenance certificates relating to Lifting Equipment must be maintained by Contractor and made available to Santos upon request.

Tools and Equipment (Plant Safety)

Contractor must ensure all plant, tools and equipment to be used are serviceable and maintained in operable, safe condition and that users are trained, experienced, and – where required – licensed and certified.

Where required the contractor must ensure that a risk assessment has been completed for plant and equipment use. This information must be communicated to the users of this equipment and relevant controls must be implemented and monitored.

Dropped Objects

If required by the SOW, the Contractor will develop, implement and maintain a dropped objects prevention system and awareness program.

Radiation

If required by the SOW, the Contractor will maintain a program to control the risks associated with radioactive sources, which includes but is not limited to the assessment of plant, tasks and the risk of radiation exposure.

Pressure Systems

If required by the SOW, the Contractor will maintain a program to control the risks associated with pressure systems, which will as a minimum ensure an assessment of plant, equipment and tasks and that pressurised equipment is operated within safe operating limits.

Manual Handling and Ergonomics

The Contractor will maintain a program to control the risks of manual handling and ergonomics injuries, which includes but is not limited to the assessment of tasks and plant interactions.

Personal Protective Equipment

Contractor must supply all members of Contractor Group with PPE, at its own expense. PPE must be maintained in good condition or replaced if worn or damaged. Must be worn on all relevant occasions as indicated by notices, instructions, and good practice. The minimum PPE requirements include:

- + Wrist to ankle, antistatic Cotton or Flame Resistant (FR) clothing
- + Medium impact safety glasses or goggles in designated areas
- + Head protection in designated areas
- + Steel toe capped foot protection with ankle support
- + Appropriate gloves for the job
- + Hearing protection where specified

Additional/ specialist PPE equipment must be provided by Contractor depending on work-related hazards.

Refer to Personal Protective Equipment procedure for further details

Security

If required by the SOW, the Contractor must have in place systems to manage the necessary security requirements to ensure the safety of their personnel.

Santos's security focus includes:

- + People: Contractor must ensure security of people is a priority
- + Assets: Contractor protects Santos's assets by incorporating security into design and operations
- + Information: Contractor protects Santos's information by implementing procedures that ensure information security.

The Contractor will periodically review and update the Security arrangements to ensure its ongoing relevance to the SOW.

Any security incident must be reported through to Santos as per incident reporting guidelines.

Where warranted Santos may require Contractor to provide a Security Plan relevant to the SOW.

Mobilisation / Demobilisation Plan

When requested by Santos, the Contractor must develop and implement a mobilisation and demobilisation plan. The plan must include but not be limited to:

- + A description of roles and responsibilities of personnel completing this phase
 - + Hazards associated with demobilisation
 - + Waste management and disposal (including segregation and volume tracking); and Site restoration and reinstatement
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1.5 Environment

Environment Approvals

Contractor must be responsible for adherence to the site Environment Approvals including applicable Environment Plans (and supporting Oil Pollution Emergency Plan – OPEP) and all statutory requirements and the Santos Management System requirements.

Contractor must provide the necessary information to Santos to prepare Environment Plan updates/ environmental approval and compliance documentation and statutory environment reports.

Environment Audits

Santos must have the right to conduct environment audits/ inspections of Contractor's operations, equipment, and emergency procedure at any time. This requirement must not relieve the Contractor of its own obligations to conduct audits and reviews of its own HSE performance or expose Santos to any liabilities which may arise from the Contractor's failure to satisfy its Environmental obligations.

Cultural Heritage Impact Management

Contractor must ensure that appropriate measures are taken to identify and protect cultural heritage sites in accordance with Statutory and Santos requirements. Contractor must also ensure that its activities do not negatively impact on the customs and cultural traditions of local peoples.

Waste Management

The Contractor must comply with Santos Waste Management requirements. The Contractor must also be responsible for conducting environmentally acceptable handling, storage, treatment, transportation, and disposal of all waste generated by Contractor whilst performing the scope of works, in accordance with all federal and state regulations and any additional Santos requirements.

Quarantine

The Contractor must guarantee all goods, machinery, plant and equipment including transit packaging and shipping containers, supplied from overseas comply with regulatory requirements including the Biosecurity Act 2015 and relevant Australian Quarantine regulations.

1.6 Material Management

Chemical Management

If utilised during the execution of the Contract, the Contractor must provide its policy for the use, transportation, handling and storage of fuel and hazardous materials to Santos.

The Contractor must:

- + Complete assessments on all chemicals required for the work scope in accordance with the Chemical Management Procedure (and for offshore requirements also see SMS-HSS-OS03-PD01 Chemical Management
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Procedure

- + Provide full chemical disclosure and chemical product/component ecotoxicity data so that Santos can determine if the product or components are hazardous, toxic, biodegradable, bio-accumulative, carcinogenic and mutagenic.
- + Santos retains the right to reject any chemical due to harmfulness to personnel or the environment and the Contractor must immediately source for alternatives at its own cost.

Oil Spill and Pollution

Where there is the potential for chemicals and hydrocarbons to be released to the environment the Contractor must have in place procedures and equipment to prevent and mitigate potential spills. Comply with other additional regulatory requirements as detailed in the relevant Environment Plan and/or oil pollution emergency/contingency plan.

For vessel-based work see offshore specific requirements

1.7 Fitness for Work and Injury Management

Fitness for Work

Contractor personnel are expected to behave in a responsible manner and present themselves for work in a fit and healthy state. Specific requirements include:

- + Contractor must ensure that all members of Contractor Group are fully qualified, physically and mentally healthy and medically fit for their respective assignments
- All contractor personnel will be subject to Santos's fitness for work requirements and any drug and alcohol testing when on a Santos Site. This may include random and causal testing.

Heat Stress

Contractor must ensure all contractors personnel are educated in the risks of Working in the Heat.

Fatigue Management

Contractor must be responsible for the administration of the working hours and roster schedule for the members of Contractor Group.

Injury Management

The Contractor must align with Santos's expectations on injury management which includes providing prompt medical care to its injured personnel and conducting a return-to-work assessment before allowing personnel to return for normal duty.

Industrial Hygiene

Contractor must have a process in place to assess and manage occupational hygiene and exposure control. This includes workplace exposure to noise, vibration, dust, radiation, fumes etc.

Pandemic (COVID 19)

Contractor must prepare a suitable Pandemic and Preparedness Response Plan whilst conducting services for Santos which must meet or exceed the requirements outlined in the advice of local government and/or the Australian Government Department of Health.

1.8 Asset and Operations Integrity

Design, Construction, Installation, Commissioning

The Contractor must ensure their activities comply with:

- + Santos's design, construction, installation, commissioning and decommissioning requirements as applicable to the SOW.

Management of Change	The Contractor must apply a Management of Change procedure to ensure that risks associated with changes to the Contractor's organisation, engineering (design and implementation) and documentation, have been assessed and controlled.
Safety Critical Equipment	<p>Contractor must ensure that all safety-critical equipment as defined by the asset/activity or Safety Case is regularly maintained, tested, and recorded on a register and always stored in a serviceable condition for immediate use.</p> <p>The members of Contractor Group must be instructed, trained and, where required, certified in the use of such safety critical equipment.</p>

1.9 Emergency Preparedness and Response

Emergency Response	<p>The Contractor must develop an ERP for the SOW which includes scenarios that are applicable. The Contractor's ERP must interface with the relevant requirements of any relevant Santos ERPs and OPEPs.</p> <p>The Contractor must ensure all employees are trained and competent in their duties and/or requirements under the approved ERP and maintain evidence of the education.</p>
Prevention of Fires	<p>The Contractor must:</p> <ul style="list-style-type: none"> + Not permit any open flame (other than welding and cutting torches) + Confirm an approved permit system in place for any hot work + Confirm, where required, only Intrinsically Safe (IS) equipment is available for use + Confirm all motors and battery-operated equipment are Intrinsically Safe (where required) + Confirm engine exhausts are equipped with spark arrestors if they are to be within an area with risk of ignition of process hydrocarbons.

1.10 Incident Reporting, Investigation and Follow-up

Incident Reporting	<p>Contractor must report all incidents including but not limited to injury, occupational illness, loss of primary containment, unplanned releases to the environment and all regulatory breaches through both the Contractor's own processes and, at the very least, to their immediate Santos supervisor.</p> <p>The Contractor must have a formal process, or processes, for hazard reporting and corrective action close-out.</p>
Incident Investigation	The Contractor must have a procedure for incident investigations. The Contractor must conduct their own investigations using a root cause analysis technique and report the findings to Santos. Depending on the severity of the incident Santos may conduct a parallel investigation for High Potential Events.

1.11 Audit, Performance Review and Continuous Improvement

Audit	<p>Santos must have the right, but not the obligation, to conduct audits / inspections of Contractor's operations, equipment, and procedures as they relate to the agreed scope of work only.</p> <p>The Contractor must include in their HSEMP an audit and inspection assurance program that is commensurate with Contractor's SOW.</p>
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Performance	<table border="1"> <thead> <tr> <th>Report</th><th>Santos Expectations</th></tr> </thead> <tbody> <tr> <td>Monthly Reporting</td><td>Contractors must submit to Santos, a monthly summary report of its health safety and environmental performance (relating only to the scope of work(s) conducted for Santos) during that month in the agreed format. Report must be completed by the 7th of every month in ISN or Attachment "Y" form (depending on contract requirements)</td></tr> <tr> <td>Ad-hoc Reporting</td><td>The Contractor must, on request by Santos, provide ad-hoc reports. This may include daily reports that include hazard observations, incidents and HSE issues.</td></tr> <tr> <td>Report Maintenance</td><td>The Contractor must maintain a record of its reports and review the self-assessment findings with Santos during regular interface meeting. Santos must conduct an assessment on Contractor's performance on a scheduled basis, unless otherwise advised by Santos.</td></tr> <tr> <td>Contractor Self Monitoring</td><td>The Contractor must undertake self-monitoring to confirm and demonstrate to Santos that it is meeting HSEMP and other business expectations and requirements Evidence of the self- monitoring must be provided in the monthly reports. The frequency of the self-monitoring must be agreed to during contract kick-off meeting.</td></tr> </tbody> </table>	Report	Santos Expectations	Monthly Reporting	Contractors must submit to Santos, a monthly summary report of its health safety and environmental performance (relating only to the scope of work(s) conducted for Santos) during that month in the agreed format. Report must be completed by the 7 th of every month in ISN or Attachment "Y" form (depending on contract requirements)	Ad-hoc Reporting	The Contractor must, on request by Santos, provide ad-hoc reports. This may include daily reports that include hazard observations, incidents and HSE issues.	Report Maintenance	The Contractor must maintain a record of its reports and review the self-assessment findings with Santos during regular interface meeting. Santos must conduct an assessment on Contractor's performance on a scheduled basis, unless otherwise advised by Santos.	Contractor Self Monitoring	The Contractor must undertake self-monitoring to confirm and demonstrate to Santos that it is meeting HSEMP and other business expectations and requirements Evidence of the self- monitoring must be provided in the monthly reports. The frequency of the self-monitoring must be agreed to during contract kick-off meeting.
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Review	Contractor must have a formal process to regularly (at least annually) assess contract HSE performance against objectives. Where deficiencies are identified, corrective actions must be developed and implemented.										
Contract Close-Out Meeting and Report	For contracts of significant value and / or risk, a formal contract close-out meeting is to be held with all parties represented to discuss the contractors overall HSE performance.										

1.12 Information Management and Document Control

HSE Documentation	<p>The Contractor must have an effective document control system in place.</p> <p>The Contractor will ensure relevant HSE documents are accessible to Contractor Group personnel, other workers and visitors.</p> <p>Contractor must store HSE documents for at least five years after the day that the document was created.</p>
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2. Additional Onshore Specific Requirements

2.1 Additional HSE Requirements General

Automated and Semi-Automated Equipment Functioning	<p>The Contractor must have a process in place for an industry recognized risk assessment (HAZOP) or equivalent), to manage and mitigate the risks associated with Contractor Equipment.</p> <p>The Contractor must supply copies of risk assessments for all automated and semi-automated plant or equipment including the Human Machine Interface Attachment (HMI) systems.</p>
Operations Integrity (Including Ignition Control and Preventative Maintenance)	<p>The Contractor must:</p> <ul style="list-style-type: none"> + Operate under an industry recognised permit to work system.

- + Develop and maintain a hazardous zone layout diagram for the Wellsite. Ignition sources must be identified and eliminated or otherwise controlled by the Contractor at the Wellsite.
- + Identify hazardous zones and methods of isolation/separation document requirements in risk assessments and work procedure documents

Excavations

Contractor must implement Santos Excavation Procedure for all excavation works on a Santos Site. This includes training and competency requirements for dedicated roles referenced in the procedure.

Permit to Work

The Santos Work Permit Procedure (SWPP) is designed to manage risks to health and safety arising from the interaction between work activities and process hazards within Santos Production Facilities and Fields.

Where work activities are on a Santos Site, contractors must complete a permit application and perform work in accordance with permit conditions.

Diving

For inshore diving, when any person's head is submerged at any depth, or they enter a pressurised work environment >0.5msw to perform any task;

- Minimum training meets or exceeds AS(/ANZ) 2815.1 Training and certification of occupational divers
- A dive supervisor is trained in accordance with AS/NZS 2815.5
- All Diving activities meet or exceed AS/AZS 2299.1 – 2015 Occupational Diving Operations Part 1: Standard operational practice

Land Transportation

Contractor's Personnel who are required to drive in the field must complete the required training in accordance with Land Transportation procedure. The requirements are provided under three pillars comprising a Safe System approach to Road Safety:

Elements	Summary of Requirements
Safe Driver	<ul style="list-style-type: none"> - Approved drivers must have their own In Vehicle Monitoring System (IVMS) key. - Drivers need to be licenced for the type of vehicle they are required to drive. <p>Drivers of Heavy Vehicles must have pre-employment traffic history check undertaken</p>
Safe Journey	<ul style="list-style-type: none"> - All journeys must be planned for safe arrival - Speed is limited to 60Km/h on unsealed roads - Overtaking another vehicle is prohibited when driving in dust or other situations of reduced visibility like flooded areas
Safe Vehicle	<ul style="list-style-type: none"> - Vehicles must be maintained and inspected regularly - Must not exceed their safe load limits - Light vehicles and Heavy vehicles must comply with the Safer Together Vehicle Specifications

For further details Land Transportation Procedure

3. Additional Offshore Specific Requirements

3.1 Additional HSE Requirements General

Invasive Marine Species	The Contractor must ensure all offshore vessels and immersible equipment comply with applicable state and commonwealth requirements for the management of invasive marine species as well as Santos specific requirements
Heavy Fuel Oil Systems	<p>Support Vessels (does not mean commercial trading vessels, e.g., Offtake Tankers, LPG, Condensate, & LNG gas carriers) with dual fuel systems must ensure that the Heavy Fuel Oil system, e.g., tanks, lines, pumps, etc., is isolated prior to commencement of work.</p> <p>Procedures must be in place to manage any spills or releases of hydrocarbons to the environment in alignment with the shipboard pollution emergency response plans as well as Santos specific requirements.</p>
Chemical Management	<p>If utilised during the execution of the Contract, the Contractor must provide its policy for the use, transportation, handling and storage of fuel and hazardous materials to Santos.</p> <p>The Contractor must:</p> <ul style="list-style-type: none">+ Complete assessments on all chemicals required for the work scope in accordance with Chemical Management (and for offshore requirements also see EA-91-II-10001 Offshore Division Operations Chemical Approval Procedure)
Lifting Equipment (Additional for Offshore)	Offshore containers, skips, baskets, frames and bins must comply with the latest relevant DNV Standards and recognised applicable international standards. The Contractor must submit a basket documentation package to the Perth MLC prior to collection which should include; CVI, Container NDT, Sling NDT and the Santos Cargo Load-Out Checklist
WARAME	Santos Offshore is a member of the Western Australian Resources Aeromedical Evacuation (WARAME), which has existing patient weight restrictions. The Medical weight requirements state that personnel weighing 140.0 kg or more will not be permitted to be present on site unless a risk assessment has been conducted; or there is a Santos exemption in place. Northern Territory travel requirements will differ from the WA restrictions.
Environment Plan Inspections	Santos must have the right to conduct environment audits/ inspections of Contractor's operations, equipment, and emergency procedures at any time as relevant to the Environment Plan.
Oil Spill and Pollution	For vessel-based work, procedures and equipment will align to the shipboard pollution emergency response plan and marine regulatory requirements. Vessel drills must be conducted on managing spills or unwanted releases.