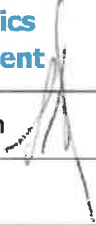




SO-91-IQ-00189



Quarantine Procedure

PROJECT / FACILITY	Supply Chain Management
REVIEW INTERVAL (MONTHS)	48 Months
SAFETY CRITICAL DOCUMENT	NO

Rev	Owner	Reviewer/s <i>Managerial/Technical/Site</i>	Approver
	Land Logistics Superintendent	Supply Base Supervisor	Manager – Gas Assets
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Rev	Rev Date	Author / Editor	Amendment
0		Ramboll Environ on behalf of Santos Energy - Supply Chain Management	Development of a new Supply Chain Management – Quarantine Procedure
14	29/01/19	Emily Kerr	Document updated into Santos template only.
14-A	July 2019	Jacobs	Review for currency and streamlining
14-B	27/11/19	Jacobs / Patrick Becker	Issued for review and comment
15	19/12/19	Jacobs / Patrick Becker	Issued for use.

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Definitions and Abbreviations

Term	Definition
Action / Barrier	Any physical, chemical, procedural or administrative process or control implemented at a staging point along a vector pathway that prevents or intercepts NIS contamination.
Cleaning	Use of a high-pressure water or air cleaner, ensuring that the item does not harbour any non-quarantine compliant.
Contamination	The contamination at any point of a vector along a pathway step / staging point from general freight, vessels, aircraft (incl. Helicopters) or personnel (incl. accompanying luggage) by non-indigenous species.
Contractor	Means any person / company engaged by Santos to perform any part of a WUC, (this includes a Contractor's Sub-contractor/s), but not including an employee of Santos.
Corrective Action	Action to remediate the impact of a detected non-conformance.
Declared Weed	A plant species or parts there-of that is 'Declared' under the <i>Biosecurity and Agriculture Management Act 2007</i> (BAM Act) [see the Western Australian Organism List (WAOL) to find out the status of organisms, and weeds.org.au/WoNS for a list of weeds of national significance).
Incident	An introduction of NIS to VI.
Interception	Discovery, removal and/or eradication of NIS at a point on a vector and / or pathway step / staging point.
Introduction	The arrival of a live NIS at VI.
Near Miss	An interception of NIS contamination of a vector upon arrival to VI.
Non-indigenous Species (NIS)	Any species of plant, animal or micro-organism not occurring naturally at the Site whose presence there is due to intentional or accidental introduction. (also taken to mean: 'introduced', 'invasive', 'alien', 'exotic' 'weed' or 'pest'). This may include foreign plants, declared weeds and native plants, insects and spiders of concern (or their eggs/larvae), and amphibians, reptiles and mammals (native and non-native) not indigenous to Site
Pathway	The route of travel for a given vector
Personnel	Refers to all relevant personnel including but not limited to Santos personnel, Suppliers, Contractors (and their Sub- contractors), Consultants and 3PLP
Quarantine Controlled Marine Access Zone (QCMAZ)	Quarantine controls apply for all marine vessels that travel to Site or travel within 2 km (LAT) from Site and the Montebello Islands Marine Conservation Reserve (MBI MCR).
Quarantine compliant state	Free from any invertebrates and vertebrates, seeds, plant material, soil with no prohibited packaging
Shall	Indicates a mandatory requirement which must be complied with.
Site	Santos's operational facilities at Varanus Island.
Staging Point	A point along a pathway where a vector is stopped for transfer, inspection or processing before continuing to the final destination.
Supplier	A Company or individual that is responsible for supplying general freight /

	equipment / material to Santos.
Supply Base	A major freight staging point, for consolidation, inspection and cleaning of freight for transport to Site.
Vector	A vector is the physical mode of transport that might enable the introduction or translocating of NIS along a pathway.
Work Under the Contract (WUC)	Means the whole of the work which the Supplier, Contractor (incl. their Sub-contractor/s), Consultant, and/or 3PLP is or may be approved by Santos to undertake and complete under the Contract and includes the provision of personnel, plant, machinery, goods, materials, equipment etc.

Abbreviation	Definition
Santos	Santos Energy Limited.
3PLP	Third Party Logistics Provider.
BAM Act	<i>Biosecurity and Agriculture Management Act 2007</i>
BWI	Barrow Island.
DPIRD	Western Australian Department of Primary industries and Regional Development (Formerly DoF and DoA: Departments of Fisheries and Agriculture).
DBCA	Western Australian Department of Biodiversity, Conservation and Attractions (Formerly DPaW; Department of Parks and Wildlife).
LAT	Lowest Astronomical Tide
MBI MCR	Montebello/Barrow Island Marine Conservation Reserve
NIS	Non-Indigenous Species.
QCMAZ	Quarantine Controlled Marine Access Zone.
QMP	Quarantine Management Plan.
QP	Quarantine Procedure.
WAOL	Western Australian Organism List
WUC	Work Under the Contract.
VI	Varanus Island.

1 PURPOSE

The purpose of this Quarantine Procedure – SO-91-IQ-00189 (QP) is to provide:

- + Santos Energy Limited (Santos) personnel with specific information regarding quarantine management requirements relevant to managing, inspecting and reviewing Santos Suppliers, Contractors (and their Sub-Contractors), Consultants and Third Party Logistic Providers (3PLP); and
- + Suppliers, Contractors (and their Sub-Contractors), Consultants and 3PLP with detailed quarantine management requirements relevant to their work under the contract (WUC) with Santos.

Note: This QP aligns with Santos's overarching Quarantine Management Plan (QMP, EA-91-RI-10002) ensuring that regulatory approved quarantine management processes are being implemented effectively along Santos's supply chain operations to Varanus Island (VI) (Site) or through the Quarantine Controlled Marine Access Zone (QCMAZ) by land, marine or air transport.

The overarching objective of the QP is to ensure that Santos's regulatory quarantine management requirements are implemented, audited and communicated to all parties involved with the transportation of personnel, luggage, goods, materials, equipment, plant and machinery for operations and projects where quarantine management applies to:

- + Ensure all freight, personnel, vessel and aircraft to arrive in a compliant state;
- + Prevent operational and future construction activities introducing Non-Indigenous Species (NIS) such as foreign plants, declared weeds and native plants, insects and spiders of concern (or their eggs/larvae), and amphibians, reptiles and mammals (native and non-native) not indigenous to Site; and

The QP applies to:

- + Materials, equipment and plant destined for Varanus Island;
- + Personnel and accompanying luggage; and
- + Vessels, aircraft (incl. helicopters) and road transportation transporting materials and personnel destined for Varanus Island.

The QP does not apply to:

Quarantine management requirements to prevent the introduction of marine pests from vessel hulls or ballast water (refer to Santos Environmental Requirements for Offshore Marine Vessels - AE-91-IQ-00202),

- + Management measures and actions for the detection, control and eradication of introduced terrestrial NIS to Site. Management measures and actions for introduced terrestrial NIS to Site are documented in the Varanus Island Quarantine Response Guide (SO-91-ZI-12001); and
- + Emergency access requirements to Site.

2 SCOPE

The QP and associated QP Management Action Table (SO-91-IQ-00189.01) have been developed for Santos personnel, Suppliers, Contractors (and their Sub- contractors), Consultants and 3PLP (Personnel) to:

- + Detail the action / barriers required for implementation for vectors travelling along pathway steps / staging points; and
- + Provide details for personnel with respect to Santos's requirements for training, awareness and incident reporting specific to Quarantine management.

*Note: personnel shall read all of the main body of the QP as well as their particular quarantine management requirements based on their particular task or WUC as outlined in **Section 4**.*

3 REFERENCE DOCUMENTS, FORMS AND REPORTS

Table 3-1: Santos reference documents

Document Number	Document Title
EA-91-RI-10002	Quarantine Management Plan (QMP)
SO-91-ZI-12001	Varanus Island Quarantine Response Guide
EA-00-RI-10058	Santos Environmental Monitoring Program
EA-91-IH-10001	Environmental Compliance Requirements for Offshore Marine Vessels
EA-91-IG-00003	Environmental Auditing and Inspection Procedure
AE-91-IQ-00232	Forwarding, Packaging & Marking Instructions for Suppliers
QE-91-IF-00042	Aviation Standard

4 QUARANTINE OPERATIONAL CONTROL

4.1 Roles and Responsibilities

4.1.1 Santos Personnel

Santos are responsible for providing resources (e.g. financial, equipment, expertise and management support) to execute Santos's quarantine management requirements as detailed within the QP Management Action Table provided with this QP (SO-91-IQ-00189).

Santos's key roles and responsibilities for ensuring that quarantine management objectives are being met and quarantine management practices are being undertaken along the supply chain are outlined in Section 7.2 of the QMP.

4.1.2 Suppliers, Contractors (including Sub-contractor/s), Consultants and 3PLP

Suppliers, Contractors (including their Sub-contractors), Consultants and 3PLP are responsible for ensuring all materials supplied to Santos that are destined for Varanus island are free from NIS and meet the quarantine management requirements detailed in their WUC and the QP Management Action Table, provided with this procedure.

Key roles and responsibilities for ensuring that quarantine management objectives are being met and quarantine management practices being undertaken along the supply chain are outlined below:

- + Ensuring all quarantine management processes / requirements are undertaken in accordance with this QP and / or the WUC;
- + Facilitating and enforcing compliance with this QP, and in particular the specific quarantine requirements as per the QP Management Action Table;
- + Providing sufficient resources to meet the quarantine responsibilities based on their particular WUC;
- + Submitting the quarantine management requirements for review and acceptance by Santos and making amendments based on any Santos review comments;
- + Undertaking inspections and audits as required by this QP and providing this information to Santos as required;
- + Ensuring all their personnel receive appropriate quarantine training and inductions as required under the WUC;
- + Recording any quarantine related Incidents or Near Miss and providing this information to Santos;
- + Assisting Santos, based on an Incident or Near Miss reported by them, with undertaking an Incident investigation, developing corrective actions, monitoring their implementation (if required) and ensuring all Incidents or Near Misses including actions are closed out appropriately;
- + Ensuring the current version of this QP is available to all personnel; and
- + Maintaining and providing all relevant quarantine inspection sheets and records as required under this QP and QP Management Action Table in a readily available and auditable format.

4.1.3 Inductions, Training and Awareness

All personnel shall undertake their work with respect to quarantine management in accordance with the requirements of this QP, their WUC and generally in a manner that minimises the potential for quarantine Incidents or Near Misses to occur at Site or along the supply chain.

Suppliers, Contractors (including their Sub-contractors), Consultants and / or 3PLP shall provide adequate training to their relevant personnel on the requirements of this QP relevant to their specific WUC. Personnel charged with carrying out quarantine inspections (i.e. 3PLP) must be trained in quarantine inspection procedures prior to commencing work. Training records shall be retained and provided to Santos upon request.

All personnel travelling to site or directly involved with conducting logistics activities **must** also undertake the Santos online induction and E-Learning Quarantine Awareness Module.

4.2 Santos Supply Chain

Santos is responsible for the acquisition and transportation of all goods and services required to operate and maintain operational Site facilities and the implementation of quarantine management processes along Santos's supply chain to Site.

4.2.1 Santos Suppliers / Contractors

Santos Suppliers / Contractors (including their Sub-contractors) prepare and package goods, materials, equipment and plant for transportation to Site, which are then forwarded to Santos contracted Supply Bases.

4.2.2 Santos Supply Bases

Santos's materials handling and logistical functions are undertaken at facilities at Perth metropolitan and regional supply bases. Santos contracts the Supply Base facilities and support services through a 3PLP, to receive, mobilise and dispatch goods, materials, machinery and equipment destined for VI.

Consignments destined for Site are primarily dispatched from the Perth metropolitan Supply Base, which is received at regional supply bases for consolidation and inspection before onward dispatch to Site. Some consignments are mobilised and dispatched directly from the regional supply bases. Designated quarantine zones are used at each supply base to prepare shipments where quarantine management is required to Site.

4.2.3 Freight Transport

From the Perth metropolitan Supply Base, freight is dispatched on an as needed basis, to the regional supply bases (approximately 1,550 km). Trucks travelling to the Supply Base stop overnight at roadside parking areas. From the Supply Base, freight is trucked to the mainland port where it is then loaded onto a marine vessel upon which it is transported to Site.

Based on the vectors and subsequent pathways and staging points, the range of barriers that shall be implemented can be determined from utilising the QP Management Action Table provided with this QP. The responsibilities are also outlined in detail in QP Management Action Table once vectors, pathways and staging points are selected.

5 QUARANTINE IMPLEMENTATION STRATEGY

5.1 Quarantine Procedure Management Action Table

The required actions for each party under the QP are contained within the [QP Management Action Table](#) (SO-91-IQ-00189.01). This table filters all quarantine functions and presents the relevant actions to be undertaken by the relevant party, based on the supply chain vectors and pathways. QP Management Action Table include links to any relevant documentation such as forms, checklists and inspection logs as outlined in **Table 3-1**.

5.2 Quarantine Monitoring and Retention of Data

Requirements for the provision of quarantine monitoring with respect to this QP is included within the QP Management Action Table provided with this procedure and any additional requirements may be included in the WUC.

5.3 Quarantine Incidents / Near Misses

Quarantine Incidents/near misses include events that have directly or can indirectly cause quarantine impacts or harm as well as events and near-miss events which may or may not have resulted in a direct or indirect quarantine impact.

Santos defines quarantine-related incidents and near misses as follows:

5.3.1 Incident

An introduction of Non-Indigenous Species (NIS) to VI.

5.3.2 Near Miss

An interception of NIS contamination of a vector upon arrival to VI.

5.3.3 Non-Conformance

Any supplier-prepared materials received by Santos that have contamination, are incorrectly packaged, or do not have the correct documentation and labelling upon delivery to the supply base, will be rejected or made compliant prior to shipment. Non-conformances will be recorded and addressed with the supplier as appropriate.

As example of a non-conformance: equipment is not clean and has spider webs on it when it is inspected at Perth Supply Base.

5.3.4 Quarantine Incident/Near Miss Notification

All quarantine incidents or Near Miss events will be entered into Santos's Incident Management System, investigated and reported as per Santos's Hazard and Incident Reporting Procedure (AE-91-IF-00002).

All relevant Information pertaining to an Incident (i.e. incident details, photos, evidence) is to be provided as soon as practicable to Santos for notification to Regulators in accordance with the Incident reporting requirements. Additional information must be provided upon request.

5.4 Control of Quarantine Records

Quarantine monitoring records are to be maintained in a correct and auditable manner with appropriate supporting evidence for demonstrating compliance with this QP for a period of 2 years. Quarantine records shall be safeguarded against accidental destruction or deterioration to ensure that they remain legible, identifiable and traceable. All quarantine records shall be compiled and issued to Santos upon request.