



# WA-402-P and WA-403-P Environment Plan - Summary

DATE: 1 SEPTEMBER 2010

PROJECT: J09-0075

DOC NO.: ENV-REP-J09-0075-003 REV 0.DOC

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<b>DOCUMENT REVISION STATUS</b>					
<b>REV</b>	<b>DESCRIPTION</b>	<b>AUTHOR</b>	<b>REVIEW</b>	<b>APPROVAL</b>	<b>DATE</b>
A	Issued for internal review	M Drenth	K Buhler		19 May 2010
B	Issued for Client Approval	M Drenth	K Buhler	J Gillespie	24 May 2010
0	Issued for Use	M Drenth		J Gillespie	1 September 2010

## INTRODUCTION

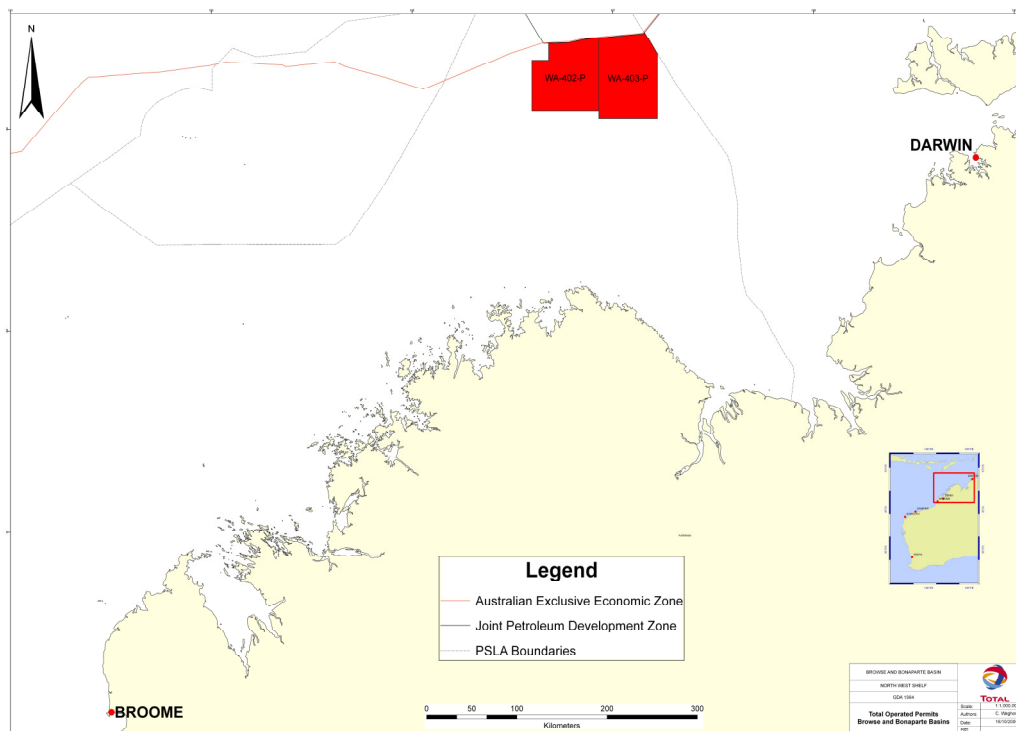
This summary of the WA-402-P and WA 403-P Environment Plan (Document Reference Env-Rep-J09-0075-002) has been prepared by TOTAL Exploration & Production Australia (TEPAU). It presents a summary of the aforementioned plan in accordance with requirements of the *Offshore Petroleum and Greenhouse Gas Storage (Management of Environment) Regulations 2009*.

TEPAU is proposing to drill three exploration wells, located in Permit Area WA-403-P and a to be determined number of wells in Permit Area WA-402-P. These permit areas are located in Commonwealth Waters, approximately 420 km west, north west of Darwin and 300 km north of Truscott in the Bonaparte Basin (see Figure 1 below).

Drilling in WA-403-P is expected to start between Q2 and Q4 in 2010. Drilling in WA-402-P is expected to start in 2011. The drilling rig will be the anchored semisubmersible rig Songa Venus operated by Songa Offshore ASA. Each well is expected to take around 80 days to complete. An additional 15 days for testing each well will be required if hydrocarbons are discovered.

Further information, including the well schematics, will be submitted to the Western Australian (WA) Department Mines and Petroleum (DMP) in the Drilling Program. For any wells other than those listed in Table 1 below, environmental management will be addressed in a bridging document to be approved by the DMP prior to commencement of those wells.

**Figure 1: Location of the WA-402-P and WA-403-P Permit Areas**



## BACKGROUND

The drilling activities are typical, in terms of technical methods and procedures, of standard exploration and development campaigns conducted in Australian marine waters. No unique or unusual equipment or operations are proposed. Production testing will be conducted on the deep wells if hydrocarbons are discovered.

### **WA-403-P Well - targeting Plover Formation.**

The wells will be drilled in a water depth of approximately 80 to 120m. Total depths will be approximately 4,650 m below Mean Sea Level (MSL) (details provided in Table 1 below). The top section of the well (914mm and 660mm diameter hole sections) will be drilled using seawater with prehydrated gel (PHG) 'sweeps' to circulate drilled cuttings from the hole. The cuttings and drilling fluids will be discharged at seabed level in an open system. After drilling the upper sections, steel casings (762mm and 508mm diameter) will be cemented into place within the hole.

After the setting of the 508mm surface casing, a Blow Out Preventer will be installed over the wellhead. From this point the capture and recirculation of drilling fluids and drilled cuttings from the well bore back to the rig (closed system) is conducted. This occurs during the subsequent drilling of the deeper remaining hole sections (445mm, 311mm, 216mm and if required the 152mm contingency section). The respective casing sizes for these hole sections are 340mm, 244mm, 178mm and if required 114mm for the contingency section.

The 445mm hole section will be drilled with Water Based Mud (WBM) and all other lower sections will be drilled using Synthetic Based Mud (SBM). The SBM will be separated and recovered from the drilled cuttings using industry standard separation equipment to reduce the Oil On Cuttings (OOC) below 8% w/w as per Total company rule (standard) CR EP FP 470 (Non aqueous based mud). Such a system generally allows operators to reach 5% OOC and this will be the target for the project. Depending on the results of a survey which is conducted on the selected Rig, the equipment which is planned to be used to separate the drilled cuttings consists of shale shakers, a de-sander and de-silters. High-speed variable centrifuges will process and assist in treating the mud to ensure it remains within the specifications required to drill the well. A cuttings centrifuge dryer will then be used to reduce the OOC to the target level and an additional centrifuge may be used to process the liquid phase separated by the cuttings centrifuge dryer. The dried drill cuttings and the WBMs will be discharged to the sea after use. The used SBM will be re-used by the drilling fluids contractor selected for the project. The SBM is reconditioned offshore, and onshore, and is then used for drilling wells for the drilling fluids contractor's other clients.

Approximately 425m<sup>3</sup> of cuttings will be generated and disposed of to the sea during the well. A SBM Management Plan and Vessel to Rig SBM and Fuel Transfer Procedures are followed during the operations to ensure spills do not occur.

In the case that hydrocarbons are discovered and the decision is made to conduct a Well Test, it is expected that flaring of gas at the maximum rate of 48,000 m<sup>3</sup>/hr will occur intermittently over a period of 48 hours during the well test. It is expected the well will

produce essentially a dry gas test. Compressors will be on board to assist burning diesel at the burner heads (which acts as pilot for the gas flare). The maximum produced fluid over a two day test (assuming 24 hrs of total flow) is estimated to be 1250 m<sup>3</sup> of gas, 850 m<sup>3</sup> of condensate and 150 m<sup>3</sup> of produced water. All produced gas and fluids are disposed of in the high efficiency flare system. The H<sub>2</sub>S concentration should be less than 30 ppm and CO<sub>2</sub> concentration of less than 30%. The maximum gas flow rate will be 48,000 m<sup>3</sup>/hr, the maximum capacity of the drill string.

At the completion of drilling, the wells will be decommissioned (plugged and abandoned as per *Offshore Petroleum and Greenhouse Gas Storage Act 2006* (OPGGSA) requirements). This includes isolating any hydrocarbon bearing sands with cement plugs and cutting of the casings to remove the wellhead. Subsea equipment installed during the drilling operation will be removed. The drilling site is also inspected to ensure no debris, rubbish or other items remain after the Rig departs.

**Table 1: Key Well Details**

<b>Permit Area</b>	Block WA-403-P Bonaparte Basin targeting Plover Formation	
<b>Well Locations</b>	<i>Geodetic Parameters, Datum: GDA94, Projection: UTM Zone 52</i>	<i>Geographical Coordinates</i>
Durville-A	X=294568m, Y= 8725775m	11°31'14.4"S 127°6'59.2"E
Durville-B	X=291255m, Y= 8726200m	11°30'59.9"S 127°05'10"E
Laperouse-A	X=315442m , Y=8697375m	11°46'42.8"S 127°18'22.4"E
	Note: Block WA-402-P well locations to be announced in 2011.	
<b>Well Type</b>	Exploration	
<b>RIG Type</b>	Semi-submersible	
<b>RIG Name</b>	<i>Songa Venus</i>	
<b>RIG Contractor Name</b>	<i>Songa AC</i>	
<b>Anticipated commencement date</b>	Block WA-403-P: Q2/3 2010 Block WA-402-P: 2011	
<b>Well Duration</b>	80 days	
<b>Well testing</b>	15 days (conducted if well discovers hydrocarbons)	

<b>Total depth of drill*</b>	4300m to 4,675m vertical depth, below Mean Sea Level
<b>Drilling Fluids</b>	914mm & 660mm hole sections, Sea water with pre-hydrated bentonite sweeps.
	445mm hole sections, Water Based Mud (WBM) pre-hydrated bentonite with polymers and KCl
	311mm & 216mm hole sections & 152mm contingency hole section Synthetic Base Mud (SBM) <i>Rheosyn LAO base SBM (Syn-drill) type not yet selected</i>
<b>Drill Fluid Volumes Total</b>	1100m <sup>3</sup> Volume of Water Base Mud (Pre-hydrated bentonite mud). 1600m <sup>3</sup> Volume of Water Base Mud (Pre-hydrated bentonite mud with KCl). 1300m <sup>3</sup> Volume of SBM
<b>Drill Fluid Disposal Method</b>	WBM discharged from RIG, SBM reused by selected Drilling Fluids contractor on-shore
<b>Drilling Cutting Volume</b>	WBM 425m <sup>3</sup> SBM 200m <sup>3</sup>
<b>Drilling Cutting Disposal Method</b>	914mm & 660mm hole sections are discharge directly at the sea floor from the well annulus
	311mm & 216mm hole sections & 152mm contingency hole sections are discharged overboard from the RIG
<b>Fuel Volumes</b>	Total Fuel Approx. 2,000m <sup>3</sup> + 250m <sup>3</sup>
	Tanks Capacity 950m <sup>3</sup>
<b>Other likely chemicals associated with drilling</b>	Bentonite, barite, corrosion inhibitors, viscosity and weighting chemicals, pipe dope, lubricating oils, cleaning and cooling chemicals
<b>Personnel on board</b>	120 persons max
<b>Method of crew change</b>	Helicopter
<b>Port used for refuelling (if required)</b>	Darwin

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## **BIOLOGICAL ENVIRONMENT**

A desktop assessment of the environmental characteristics and sensitivities has been completed for this drilling programme. The key attributes are summarised below.

### **Ecological Environment**

The water depth of the permit areas ranges from approximately 80 m to 200 m. Video surveys of the area indicate some carbonate mounds with a sparse scattering of gorgonians and sponges interspersed by large patches of bare sand which is typical of the area.

### **Marine Fauna**

Fauna of national significance that may be encountered within permit areas WA-402-P and WA-403-P have been identified based on a search of the DEWHA EPBC Online Database (DEWHA, 2009). Complete details of the search results are contained in the WA-402-P and WA-403-P Environment Plan, copies of which can be obtained from TEPAU.

### **Locations of Ecological Significance**

There are no marine parks, reserves, reef structures or landfalls (typically associated with high marine productivity), bird or turtle nesting sites, or other known areas of biological significance in the vicinity of WA-402-P and WA-403-P.

The closest marine reserve is the Commonwealth Ashmore Reef National Nature Reserve and Cartier Island Marine Reserve (approximately 350 km west south-west of the permit areas). The nearest reefs are Long Reef and Holothuria Reef located approximately 250 km to the south-west of the Permit areas.

Scott Reef and Browse Island are the only existing terrestrial reserves in the offshore Browse Basin area. Both are Class 'C' Nature Reserves under WA legislation, with the major purpose of conservation being the protection of major nesting sites of the Green Turtle.

Given the distance between these conservation reserves and reefs and the proposed exploration area, drilling operations are considered unlikely to have any impacts on the reserves.

### **Commercial Fisheries**

A number of fisheries can operate within waters of the Joseph Bonaparte Gulf, however, it appears that fishing effort is limited in all fisheries except for the Northern Prawn Fishery. Prawns are commercially caught in areas of the Joseph Bonaparte Gulf, mainly in the west of the gulf and, to the north, in Fog Bay. Previous consultation with Fisheries WA for a similar proposed drilling programme indicated that there is low fishing activity in the region of the permit areas. The fisheries of the area include the Southern Blue Fin Tuna Fishery, Western Skipjack Fishery, Western Tuna and Billfish Fishery and, North West Slope Trawl Fishery.

### **Petroleum Development**

The region is very prospective for oil and gas, with previous and ongoing exploration drilling for petroleum, oil and natural gas both onshore and offshore in the Bonaparte Basin.

## ENVIRONMENTAL HAZARDS, CONTROL AND MANAGEMENT APPROACH

The proposed drilling activities will be conducted in accordance with the TEPAU HSE Policies and Objectives.

### Potential Environmental Hazards

The key environmental hazards and consequences associated with the drilling program are summarised in the table below.

Potential Consequences (Effects)		Management Measures
Noise Emission	1a Disturbance to marine fauna	<ul style="list-style-type: none"> <li>• Ensure that crew are aware about the possibility of disturbing marine fauna and that drilling start-up procedures are followed.</li> <li>• The procedure of soft-start to be followed during VSP.</li> <li>• Ensure that the DEWHA requirements for reporting cetacean sightings are followed</li> </ul>
Physical presence of rig	2a Localised disturbance to seabed from rig anchoring	<ul style="list-style-type: none"> <li>▪ The use of a semi-submersible rig reduces seafloor impact.</li> <li>▪ Adherence to anchoring procedures to minimise anchor and chain drag.</li> </ul>
	2b Interference with fishing, shipping and recreational operators	<ul style="list-style-type: none"> <li>▪ Commercial fishing groups shall be advised of the location and schedule of the drilling program.</li> <li>▪ Contractors shall remain vigilant for commercial fishing vessels during the operation and establish communications to avoid conflict.</li> <li>▪ A record of consultation with commercial fisheries groups shall be kept and made available to regulatory authorities upon request.</li> <li>▪ AMSA will be formally contacted prior to rig mobilisation.</li> <li>▪ Standard maritime safety procedures shall be adopted.</li> </ul>
	2c Light emissions during operations	<ul style="list-style-type: none"> <li>▪ Standard maritime safety procedures shall be adopted (eg AMSA).</li> <li>▪ Lighting selected to meet safety requirements.</li> </ul>
Drilling cutting and fluid discharges	3a Increased turbidity	<ul style="list-style-type: none"> <li>▪ SBMs will be recycled and retained for disposal on shore.</li> <li>▪ Drill fluids to be recycled within the drill system as practicable.</li> <li>▪ Cuttings and associated drill fluids (muds) shall be treated to achieve solids separation and meet statutory requirement for discharge (SBM).</li> </ul>
	3b Burial/smothering of benthic communities	<ul style="list-style-type: none"> <li>▪ SBMs will be recycled and retained for disposal on shore.</li> <li>▪ Low toxicity WBMs will be used for drilling.</li> <li>▪ Drill fluids to be recycled within the drill system as practicable.</li> <li>▪ Cuttings and associated drill fluids (muds) shall be treated to achieve solids separation and meet statutory requirement for discharge (SBM).</li> </ul>



Potential Consequences (Effects)		Management Measures
	3c Toxicity and bioaccumulation to marine organisms	<ul style="list-style-type: none"> <li>▪ SBMs will be recycled and retained for disposal on shore.</li> <li>▪ Low toxicity WBMs will be used for drilling the upper sections of the well.</li> <li>▪ Drill fluids to be recycled within the drill system as practicable.</li> <li>▪ Cuttings and associated drill fluids (muds) shall be treated to achieve solids separation and meet statutory requirement for discharge (SBM).</li> </ul>
Other waste discharges	4a Changes to water quality	<ul style="list-style-type: none"> <li>▪ All waste management shall comply with the <i>OPGGSA</i>, appropriate hazardous waste legislation and local government disposal guidelines.</li> </ul> <p><i>Putrescible Wastes</i></p> <ul style="list-style-type: none"> <li>▪ Waste discharges shall be limited to food scraps and sewage.</li> <li>▪ Sewage and food scrap disposal will conform to the requirement of MARPOL 73/78 Annex IV (ie macerated to less than 25 mm diameter prior to disposal).</li> <li>▪ No sewage or putrescible waste will be discharged within 12 nm of any land.</li> <li>▪ Sewage shall be macerated to a small particle size and is treated to neutralise bacteria.</li> </ul> <p><i>Solid Wastes</i></p> <ul style="list-style-type: none"> <li>▪ All other waste shall be retained onboard for appropriate disposal on shore (ie all domestic, solid, plastics and maintenance wastes).</li> <li>▪ All waste containers will be closed (ie with lid or netting) to prevent loss overboard.</li> <li>▪ Spent oils and lubricants shall be securely containerised and returned to shore upon campaign completion.</li> </ul> <p><i>Hazardous Wastes</i></p> <ul style="list-style-type: none"> <li>▪ All hazardous wastes shall be documented, tracked and segregated from other streams of operational wastes.</li> <li>▪ A complete inventory will be kept of all chemicals to allow sufficient and appropriate recovery materials to be on hand in the event of a spill (ie Material Safety Data Sheet (MSDS)s, labelling and handling procedures).</li> </ul> <p><i>Other</i></p> <ul style="list-style-type: none"> <li>▪ All drainage from decks and work areas shall be collected through a closed drain system and processed through an oil water separation system.</li> <li>▪ No sewage or putrescible waste will be discharged within 12 nm of any land.</li> <li>▪ All other waste shall be retained onboard for appropriate disposal on shore (ie all domestic, solid, plastics and maintenance wastes).</li> <li>▪ The rig will be remote from any sensitive receptors such as population centres and any emissions are therefore considered insignificant.</li> </ul>

Potential Consequences (Effects)		Management Measures
	4b Atmospheric emissions	Minimise emissions by reducing fuel usage where possible.
Hydrocarbon and/or chemical spills	5a Contamination and/or toxicity to marine species and ecology and other sensitive environments from a well blowout (crude)	<p><i>Blowout Prevention</i></p> <p>Facilities and procedures to prevent spills must be in place during drilling operations including:</p> <ul style="list-style-type: none"> <li>▪ Test the BOP prior to commencement of operations and regularly during operations.</li> <li>▪ Pressure test casing strings.</li> <li>▪ Continuously monitor for abnormal pressure parameters during drilling.</li> <li>▪ Ensure the drill crew is competent in emergency well control and OSCP procedures (TEPAU OSCP Oil Spill Contingency Plan; HSE-09-PL-035);</li> <li>▪ Songa Venus Rig Specific Procedure: MAR-FUEL-001 Transfer of SBM and Diesel Fuel;</li> <li>▪ Safety systems such as blowout preventers;</li> <li>▪ Australian Marine Oil Spill Centre (AMOSC) has confirmed the availability of oil spill recovery and clean up materials and equipment within the region.</li> </ul> <p><i>Blowout Response</i></p> <ul style="list-style-type: none"> <li>▪ Ensure rig equipment and personnel preparedness.</li> <li>▪ Preparation of project specific (or appropriate bridging documents) Emergency Response Plan (ERP) and OSCP documents.</li> <li>▪ ERPs which address oil spill incidents must be prepared in the planning phase for specific drilling locations. Plans must include: <ul style="list-style-type: none"> <li>▪ Oil spill trajectory modelling capability based on site specific metocean conditions and knowledge of oil weathering rates.</li> <li>▪ Identification of oil-sensitive marine and coastal resources and priority protection areas.</li> <li>▪ Identification of internal and external emergency organisations, responsibilities and resources (human and equipment and materials) for oil spill response, and callout details.</li> <li>▪ Spill response and cleanup strategies (offshore and shoreline).</li> <li>▪ Include OSCP and Emergency Response Plan (ERP) requirements, roles, responsibilities, procedures and objectives in induction sessions.</li> </ul> </li> </ul>

Potential Consequences (Effects)		Management Measures
	<p>5b Contamination and/or toxicity to marine species and ecology and other sensitive environments from a vessel collision or coupling failure (diesel)</p>	<p><i>Refuelling</i></p> <ul style="list-style-type: none"> <li>▪ Transfer of diesel from support vessels will be undertaken in accordance with normal operating procedures.</li> <li>▪ Transfer hoses will be fitted with dry break couplings that will be fit for purpose, not outside design life limits and regularly checked for leaks.</li> <li>▪ A crane will be used to lift the refuelling hose up to gravity drain fuel left in hose after completing transfer.</li> <li>▪ Drip trays will be provided under all refuelling hose connections.</li> <li>▪ Refuelling will occur during daylight hours, depending on sea conditions.</li> <li>▪ Spills on the rig will be contained by the sealed decking.</li> </ul> <p><i>Housekeeping</i></p> <ul style="list-style-type: none"> <li>▪ Spills will be cleaned up immediately using absorbent pads. The absorbent material will be properly disposed of onshore.</li> <li>▪ Oil and chemical spill containment and cleanup material (eg absorbent) will be available where spills are possible, including on small boats.</li> <li>▪ Fuel and diesel will be stored in large, internal tanks/bunkers onboard.</li> </ul> <p><i>Spill Prevention</i></p> <p>Facilities and procedures to prevent spills must be in place during drilling operations including:</p> <ul style="list-style-type: none"> <li>▪ TEPAU OSCP Oil Spill Contingency Plan (HSE-09-PL-035);</li> <li>▪ Songa Venus Rig Specific Procedure: MAR-FUEL-001 Transfer of SBM and Diesel Fuel;</li> <li>▪ Drill floor is sealed preventing escape of deck liquids to marine environment;</li> <li>▪ Safe fuel transfer procedures from supply vessel to drilling rig (eg checking product transfer hoses for leaks, monitoring tank levels, etc); and</li> <li>▪ Australian Marine Oil Spill Centre (AMOSC) has confirmed the availability of oil spill recovery and clean up materials and equipment within the region.</li> </ul> <p><i>Spill Response</i></p> <ul style="list-style-type: none"> <li>▪ Ensure rig equipment and personnel preparedness.</li> <li>▪ Preparation of project specific (or appropriate bridging documents) Emergency Response Plan (ERP) and OSCP documents.</li> <li>▪ ERPs which address oil spill incidents must be prepared in the planning phase for specific drilling locations. Plans must include: <ul style="list-style-type: none"> <li>▪ Oil spill trajectory modelling capability based on site specific metocean conditions and knowledge of oil weathering rates.</li> <li>▪ Identification of oil-sensitive marine and coastal resources and priority protection areas.</li> <li>▪ Identification of internal and external emergency organisations, responsibilities and resources (human and equipment and materials) for oil spill response, and callout details.</li> <li>▪ Spill response and cleanup strategies (offshore and shoreline).</li> <li>▪ Include OSCP and Emergency Response Plan (ERP) requirements, roles, responsibilities, procedures and objectives in induction sessions.</li> </ul> </li> </ul>

Potential Consequences (Effects)		Management Measures
<p>5c Contamination and/or toxicity to marine species and ecology and other sensitive environments from other spills. These could include chemicals or lube oils.</p>	<p><i>Refuelling</i></p> <ul style="list-style-type: none"> <li>▪ Transfer of diesel and other fluids (eg chemicals and WBMs) from support vessels will be undertaken in accordance with normal operating procedures.</li> <li>▪ Supplies will be transferred during daylight hours, depending on sea conditions.</li> </ul> <p><i>Housekeeping</i></p> <ul style="list-style-type: none"> <li>▪ Any conduit being drained, filled or flushed with cable fluid must be contained within a drip tray area.</li> <li>▪ Spills will be cleaned up immediately using absorbent pads. The absorbent material will be properly disposed of onshore.</li> <li>▪ Oil and chemical spill containment and cleanup material (eg absorbent) will be available where spills are possible, including on small boats.</li> <li>▪ Scuppers will be closed in the event of spills to ensure pollution from the deck is not discharged into the ocean.</li> <li>▪ Bilge water and washdown will be processed through an oily water separator (to MARPOL 73/78 and OPGGSA standards) prior to discharge overboard.</li> <li>▪ SBMs will be stored in bunded tanks with the master valve tagged under the Permit to Work System at all times.</li> <li>▪ Lube oil will not be changed during the drilling program and new lube oil will be stored onboard in large tanks. Spent oils and lubricants shall be containerised and returned to appropriately licensed facilities onshore.</li> <li>▪ All waste containers will be closed to prevent loss overboard.</li> </ul> <p><i>Chemical and Hazardous Materials Management</i></p> <p>Facilities and procedures for chemicals and hazardous materials management should be adopted taking into account relevant regulatory requirements and environmental considerations including:</p> <ul style="list-style-type: none"> <li>▪ Provision of MSDSs and handling procedures for hazardous chemicals and materials;</li> <li>▪ Provision of appropriate absorbent material and spill cleanup equipment;</li> <li>▪ Provision of segregated and contained storage areas; and</li> <li>▪ Use of low impact chemicals and materials as far as practicable.</li> </ul> <p><i>Spill Prevention</i></p> <p>Facilities and procedures to prevent spills must be in place during drilling operations including:</p> <ul style="list-style-type: none"> <li>▪ TEPAU OSCP Oil Spill Contingency Plan (HSE-09-PL-035);</li> <li>▪ Songa Venus Rig Specific Procedure: MAR-FUEL-001 Transfer of SBM and Diesel Fuel;</li> <li>▪ Safety systems such as drip trays;</li> <li>▪ Contained oil and chemical packaging and storage areas;</li> <li>▪ Containment around oil- and chemical-use areas and equipment such as the pipe deck, mud tanks, pumps, etc;</li> <li>▪ Drill floor is sealed preventing escape of deck liquids to marine environment; and</li> <li>▪ Australian Marine Oil Spill Centre (AMOSOC) has confirmed the availability of oil spill recovery and clean up materials and equipment within the region.</li> </ul>	

Potential Consequences (Effects)		Management Measures
		<p><i>Spill Response</i></p> <ul style="list-style-type: none"> <li>▪ Ensure rig equipment and personnel preparedness.</li> <li>▪ Preparation of project specific (or appropriate bridging documents) Emergency Response Plan (ERP) and OSCP documents.</li> <li>▪ ERPs which address oil spill incidents must be prepared in the planning phase for specific drilling locations.</li> </ul>
Well clean ups	6a Changes to water quality and temperature	<ul style="list-style-type: none"> <li>▪ Oil in water averages less than 30 mg/L during each period of 24 hours.</li> <li>▪ Effluent streams should be monitored prior to discharge.</li> </ul>
	6b Flaring of gas (light, hydrocarbon source, CO <sub>2</sub> )	<ul style="list-style-type: none"> <li>▪ Minimise flaring activities to shortest period practical.</li> <li>▪ Compliance with regulatory requirements.</li> <li>▪ Optimise flare burner characteristics to ensure maximum burning of all hydrocarbons produced during tests.</li> </ul>

## CONSULTATION

Various consultations have been held in the course of planning the drilling campaign. TEPAU will be consulting with relevant stakeholders to identify potential environmental issues and management requirements. Relevant stakeholders include:

- Department of Mines and Petroleum ( Western Australia – Designated Authority);
- Department of Environment Water, Heritage and the Arts (Commonwealth);
- Department of Fisheries; (Western Australia);
- Western Australian Fishing Industry Council;
- Australian Marine Oil Spill Centre; and
- Australian Maritime Safety Authority.

Consultation with these and other groups will continue up to the commencement of, and during the well drilling where changes to the program may impact stakeholders.

The Rig owner will also contact the AMSA regarding shipping movements and to report its position every 24 hours

## NOMINATED LIAISON PERSON

Total E& P Australia's nominated liaison person will be their HSE manager. The current holder of this position is Ted Kirkbride, who can be contacted on 08-9442-2000