



NOPSEMA

Report

Petroleum Environmental Inspection

Titleholder	Timor Sea Oil and Gas Australia Pty Ltd
Petroleum Activity	Northern Endeavour FPSO Operations
Environment Plan	Northern Endeavour FPSO Facility Operations, Document No. M1500AH004 Revision 4, dated 19 December 2014
Inspection Date(s)	2 June , 20 June, 23 June and 30 June 2016
Inspection Location	Level 2, 16 Milligan Street Perth
Titleholder's representative	s 22 irrelevant material
Lead Inspector	
Inspection Team	
Report Number	RMS ID 1436

REPORT DISTRIBUTION

Position	Company
Records management	NOPSEMA
HSEC Manager	TSOGA

REVISION STATUS

Rev:	Date:	Description:	Prepared by:	Approved by:
A	7 July 2016	Draft for discussion with titleholder	s 22 irrelevant material	
0	10 July 2016	Final		

Table of Contents

1	Petroleum Environmental Inspections	4
2	Inspection Method	4
3	Conclusions and Recommendations.....	5
3.1	Inspection Findings	5
3.1.1	Item 1: Processes and procedures in place for changes to impacts and risks to ensure they are reduced to ALARP and acceptable levels.....	5
3.1.2	Item 2: Adequacy of spill response arrangements and preparedness	9
3.1.3	Item 3: Compliance with Financial Assurance obligations under section 571 of the OPGGS Act.....	14
4	Report Close-out.....	15

Attachments

Attachment A – Meetings.....	16
Attachment B – Documentation inspected.....	17

Abbreviations and Acronyms

ALARP	As Low As Reasonably Practicable
AMSA	Australian Maritime Safety Authority
AMOSC	Australian Marine Oil Spill Centre
APPEA	Australian Petroleum Production Exploration Association
CICC	Corporate Incident Coordination Centre
Environment Regulations	Offshore Petroleum and Greenhouse Gas Storage (Environment) Regulation 2009 2006
EP	Northern Endeavour FPSO Facility Operations, document No. M1500AH004 Revision 4, dated 19 December 2014
FPSO	Floating Production and Storage facility
ICC	Incident Coordination Centre
IMT	Incident Management Team
MOC	Management of change
MoU	Memorandum of Understanding
NOPSEMA	National Offshore Petroleum Safety and Environmental Management Authority
OPEP	Oil Pollution Emergency Plan
OPGGs Act	Offshore Petroleum and Greenhouse Gas Storage Act 2006
OSRL	Oil Spill Response Limited
OSTM	Oil Spill Trajectory Modelling
SFRT	Subsea First Response Toolkit
SWIS	Subsea Well Intervention System
TOGA	Talisman Oil and Gas Australia
TSOGA	Timor Sea Oil and Gas Australia
TSA	Transition Services Agreement
UPS	Upstream Petroleum Services
WWCI	Wild Well Control Incorporated

1 Petroleum Environmental Inspections

NOPSEMA conducts petroleum environmental inspections as part of its legislated function to implement effective monitoring and enforcement strategies to ensure compliance with petroleum environmental law¹. Petroleum environmental inspections are undertaken by NOPSEMA inspectors appointed by NOPSEMA under Section 602 of the *Offshore Petroleum and Greenhouse Gas Storage Act 2006* (OPGGG Act).

This inspection report has been prepared in accordance with Schedule 2A, Part 2, Division 3 of the OPGGG Act. It presents the inspection team's:

- Conclusions from conducting the inspection, along with the reasons for these conclusions
- Recommendations arising from the inspection that have been raised to address non-compliance with petroleum environmental law and / or to draw the titleholder's attention to matters that are to be considered by the titleholder in relation to continuous improvement and good environmental management practice.

Note: Findings of compliance are not listed in this report.

2 Inspection Method

The inspection team prepared a petroleum environmental inspection brief and discussed this with TSOGA prior to the inspection. The brief set out the proposed inspection scope and methodology.

The inspection related to the Northern Endeavour FPSO Facility Operations activity described in the in force Northern Endeavour Floating production Storage and Offloading Facility Operations Environment Plan (Revision 4, dated 19 December 2014).

The proposed scope for this inspection included:

- Item 1: Processes and procedures in place for changes to impacts and risks to ensure they are reduced to ALARP and acceptable levels.
- Item 2: Adequacy of spill response arrangements and preparedness.
- Item 3: Compliance with Financial Assurance obligations under section 571 of the OPGGG Act

On arrival at the premises, the inspection team held an opening meeting to discuss the format and process of the inspection. Prior to departing the premises on 2 June and in subsequent inspection days on 20 June and 23 June 2016, inspectors provided an overview of the preliminary inspection findings. An exit meeting was held on 30 June 2016 and the exit brief was presented and discussed. Attendees at the opening and exit meetings are listed in Attachment A.

The inspection team reviewed documented evidence relevant to the scope of the inspection, with the assistance of TSOGA personnel. A list of documents inspected is provided in Attachment B.

3 Conclusions and Recommendations

The inspection was conducted at the offices of Northern Oil and Gas Australia, which wholly owns the titleholder TSOGA (which is formally known as TOGA).

On the first day of the inspection, TSOGA was the titleholder for the Northern Endeavour FPSO Facility activity for a period of approximately two weeks (since 16 May 2016). [s 47 business information](#)

The inspection was conducted over a number of days from 2 June to 23 June to inspect any changes to the manner in which TSOGA was, and would be, managing impacts and risks with transition of operator services to UPS. Through the inspection, it was confirmed that TSOGA proposed to amend the TSA in such [s 47 business information](#) will be significantly reduced. In particular, that by implementing the proposed draft TSA, TSOGA will not have adequate arrangements in place to implement the oil spill response arrangement described in the accepted EP. Further detail on these findings is provided in section 3.1.2 below.

On the basis of these findings, on 24 June 2016 NOPSEMA issued a section 574 Direction and a Prohibition Notice. The Direction requires TSOGA to maintain oil spill response arrangements provided for in the EP; or an equivalent, and the Notice requires the titleholder to not operate the premises otherwise than in accordance with the oil spill response arrangement in the accepted EP and current TSA or an equivalent.

The following sections present the inspectors' conclusions and reasoning in relation to each inspection topic scope. Where considered appropriate, recommendations have been made in relation to these conclusions. The detailed recommendations are included in the following section and will also be provided electronically to the titleholder's representative with the final report.

3.1 Inspection Findings

3.1.1 Item 1: Processes and procedures in place for changes to impacts and risks to ensure they are reduced to ALARP and acceptable levels

Inspectors examined systems, practices and procedures in place relevant to how the titleholder monitors changes to impacts and risks and how the titleholder manages these changes to ensure that impacts and risks are reduced to ALARP and acceptable levels. This included inspection of:

- Any changes to the EP since the change in titleholder;
- Management of change procedures and processes;
- Monitoring, auditing and management of environmental performance by the titleholder; and
- Risk assessment procedures and processes.

3.1.1.1 Management of change procedures and process

A commitment of Page 315 of the EP states:

"Permanent or temporary changes to organisation, equipment, plant, standards or procedures that have potential health, safety, integrity and/or environmental impact are subject to formal review and approval prior to initiating the change to ensure risks remain at a tolerable level....The Change

Management Operating Standard (s 47G business information) requires the change to be justified and authorised, risk assessed to understand the potential impacts of the change, a plan to be in place that clearly specifies the timescale for the change and any control measures to be implemented and the situation to be reassessed if there is an unexpected change in circumstances.”

Inspectors examined the procedures and process for MOC to determine whether they considered all relevant legislative requirements, included details on conducting an appropriate risk assessment and justification for changes proposed and included sufficient detail to ensure consistent and appropriate decision making. In particular, as there has been a s 47 business information TSOGA, inspectors examined the implementation of the MOC procedures and processes to determine if appropriate and justified outcomes had been reached.

The Change Management Procedure Revision 0 (Document 2) states that the procedure reflects the change management process applied within the company and applies to permanent or temporary changes to aspects such as organisation, standards or procedures which have the potential to impact on the environment. The procedure lists five key elements stating the process, including that a risk assessment is conducted and that changes must be justified and authorised, and includes a checklist of nine items to be considered. However, the procedure does not provide sufficient instruction for undertaking the MOC process to demonstrate that changes to an EP have been appropriately considered and documented. It does not state how the risk assessment is to be conducted or how much detail is to be provided in the risk assessment or to gain approval based on the extent and nature of the change. Further it does not refer to the completion of an authorisation form (i.e. MOC Form) or a register where all MOC are recorded, does not list who performs the risk assessment or who is required to give approval for the changes. In addition, no instruction is given on responding to the checklist questions and the required justification or supporting reasoning for the responses.

Recommendation 1438-1

MOC Procedures should be reviewed and amended to provide sufficient instruction for undertaking the MOC process to ensure that changes proposed are appropriately justified, considered and documented.

Documents detailing the implementation of management of change processes were also inspected. This included the MOC Form for s 47 business information which considered change of ownership structure and titleholder and the EP OPEP Table Change Management 21 June 2016 (Document 31) which details the changes proposed to the EP as a result of the s 47 business information to UPS and retrospective changes from a change in titleholder. Both the MOC Form and Change Management Table include consideration of legislative and other factors for determining the significance of the change and determining whether the change warrants a revision to the EP. This includes triggers for submitting a revision under the Environment Regulations, the need for consultation with stakeholders and a risk assessment of the proposed change.

However, Inspectors identified the following in the sampled MOC Form and Change Management Table:

- The risk assessment does not include justification for the risk rankings given or include sufficient information to demonstrate that risk assessment processes are consistent with those detailed and demonstrated in the EP.
- Consideration as to whether the change would result in TSOGA acting in a manner contrary to the EP (under regulation 7) was not detailed.

- The triggers listed in the Change Management Table for considering the need for a revised EP under the Environment Regulations are not consistent with those listed in the MOC Form.
- The MOC Form does not recognise that [s 47 business information](#) services and then acting as a third party service provider for oil spill response will result in a change in oil spill response arrangements. A third party service provider undertaking this role is not described in the EP.
- The MOC Form endeavours to address both the change in contract operator and the change in titleholder. These are two discrete MOC issues with different considerations.
- The full consequences of removing existing controls in place have not been identified in the Change Management Table. For example, removal of the performance standard for compliance with the Offshore Marine Discharges Adaptive Management Plan does not acknowledge that this document is a critical control for management of produced formation water discharges and without this control, or an equivalent, discharges of produced water may not be ALARP and of an acceptable level. Further, MOC processes have not considered the need to complete an MOC form for changes, such as this example, that require more detailed reasoning.
- For changes to controls, the Change Management Table does not consider whether changes provide an equivalent level of environmental performance. For example, replacement of Performance Assessment Tool checks with annual inspection provides the same level of environmental assurance frequency and content.

In addition, the MOC form does not fully consider whether TSOGA can comply with all the requirements of the existing EP and the change to impacts and risks from not having all the requirements in the EP met. This is particularly evident in Table 10-2 of the Change Management Table where oil spill response arrangements are described. In this table gaps and changes to arrangements have been identified, such as an OSRL Associate Membership not being in place (but in progress), however a consideration of changes to impacts and risks from the requirement not being met has not been recorded nor has consideration given to the extent of the change to impacts and risks from the sum of all these requirements not being met.

Given the findings from the inspection above, it is the view of the Inspectors that TSOGA has applied an MoC process that is designed to manage discrete or unexpected changes to a significant and complex change to an EP (from a change in titleholder). Inspectors consider that changes of this kind should have resulted in TSOGA submitting a revision to the EP. It is noted that NOPSEMA has requested a revision to the EP under regulation 18 and that this is to be submitted by TSOGA by 31 August 2016.

Recommendation 1438-2

Ensure that documents recording outcomes of management of change processes contain consideration of all legislative requirements, consider the full extent of the implications of the change and sufficient justification to support the outcomes and decision making based on the extent and nature of the change(s).

3.1.1.2 Environmental auditing

A commitment on Page 334 of the EP states:

“Each year the Production Environment Advisers undertake a site based environment inspection and review of performance against the EP performance outcomes, standards and measurement criteria at each offshore facility, including NE.”

Inspectors sought to confirm the processes and systems TSOGA have in place for monitoring environmental performance through environmental auditing and inspection. TSOGA provided the Northern Endeavour Draft Audit Schedule (Document 22) which is a draft schedule of internal, environment and contractor audits proposed for 2016 to 2018. It is noted from this schedule that the next corporate environment inspection of the activity is proposed for Q1 2017 and that no inspection is proposed for 2016. While it is acknowledged that TSOGA became the titleholder in May 2016, TSOGA should ensure that the frequency of the environmental inspection is undertaken each year as per the EP. Inspectors were also advised that TSOGA have committed to quarterly environmental audits of performance outcomes and standards consistent with the former titleholder's arrangements. This would be above and beyond the EP commitments of an audit each year. Inspectors sought information and documents detailing what performance outcomes and standards would be tested and at what frequency. The titleholder's representative advised that the audit program was in the process of being developed and further work was needed around what will be audited and timing.

Recommendation 1438-3

Ensure that the Northern Endeavour Audit Schedule is finalised and includes the environmental management requirements that will be tested and the frequency of testing required by the EP.

Recommendation 1438-4

Consider developing an audit program for quarterly auditing of environmental performance which lists the performance outcomes and standards which are audited for compliance and the frequency of auditing.

3.1.1.3 Environmental risk assessment

A commitment on Page 319 of the EP states:

"Potential environmental impacts from the NE FPSO are risk assessed and controlled in accordance with the process outlined in Section 5 of this EP (Risk Management Methodology). This ensures environmental risks and impacts are reduced to ALARP, and performance outcomes and standards are achieved."

Inspectors examined the procedures that support the risk management process described in the EP to determine if they ensure that impacts and risks are reduced to ALARP and acceptable. The Hazard Identification and Risk Management Procedure (Document 1) was provided and describes the environmental risk management methodology for the analysis and evaluation of environmental risks. The procedure includes a section on demonstration of ALARP and a section on demonstration for acceptability and lists criteria under each for defining low, medium and high risks.

Inspectors noted the following when considering how ALARP and acceptable levels are to be demonstrated using the procedure:

- The procedure states that medium and high residual risks are ALARP if "good industry practice is applied to the situation and/or risk". However, this ALARP demonstration does not consider whether ALARP has been demonstrated based on the recognised definition of ALARP;
- The demonstration of acceptability states that "medium and high residual risks are 'Acceptable' if ALARP can be demonstrated". The procedures does not acknowledge that 'ALARP' and 'Acceptable' are separate demonstrations required by the Environment Regulations; and

- The demonstration of acceptability includes different criteria for acceptability listed against each residual risk level but does not consider all relevant criteria, for example stakeholder expectations and principles of ecologically sustainable development.

The methodology in the Hazard Identification and Risk Management Procedure is critical for ensuring TSOGA have an appropriate process for assessing any new or changed impacts and risks to ensure that they are reduced to ALARP and acceptable levels. This is particularly important given that TSOGA will be submitting a revised EP to NOPSEMA for the activity and the assessment methodology described in this procedure underpins the EP.

Recommendation 1438-5

Ensure that procedures for assessing and controlling impacts and risks from the Northern Endeavour activity use methodology and criteria for demonstrating ALARP and acceptable levels consistent with guidance and recognised standards to support the conclusions and outcomes reached.

3.1.2 Item 2: Adequacy of spill response arrangements and preparedness

The OPGGS Act 2006 and associated OPGGS (Environment) Regulations 2009 set out the requirements for titleholders in relation to the requirements for preparing for and responding to hydrocarbon releases.

Section 572C(2) of the OPGGS Act 2006 states that:

“The registered holder of the title must, in an offshore area, in accordance with the environment plan for the petroleum activity:

- as soon as possible after becoming aware of the escape of petroleum, take all reasonably practicable steps to eliminate or control it; and*
- clean up the escaped petroleum and remediate any resulting damage to the environment; and*
- Carry out environmental monitoring of the impact of the escape on the environment”.*

Regulation 14(8AA) of the OPGGS (Environment) Regulations 2009 states that:

“The oil pollution emergency plan must include adequate arrangements for responding to and monitoring oil pollution, including the following:

- the control measures necessary for timely response to an emergency that results or may result in oil pollution;*
- the arrangements and capability that will be in place, for the duration of the activity, to ensure timely implementation of the control measures, including arrangements for ongoing maintenance of response capability;*
- the arrangements and capability that will be in place for monitoring the effectiveness of the control measures and ensuring that the environmental performance standards for the control measures are met;*
- the arrangements and capability in place for monitoring oil pollution to inform response activities*

The inspection scope was focused on determining the adequacy of spill response arrangements and preparedness. Inspectors specifically concentrated on the arrangements in place with several third party providers and the ability to access adequately trained and competent personnel as detailed in the accepted EP.

3.1.2.1 Current arrangement

The inspectors found that TSOGA currently has a Transition Service Agreement (current TSA) (Document 14) in place with the [s 47 business information](#)

provision of personal, equipment and services requirements must be in compliance with the all existing regulatory and legal obligation related to the title including, but not limited, to the Environment Plan.”

TSOGA confirmed the inspectors understanding that in the event of a hydrocarbon release the current TSA requires the former titleholder to respond to a spill from the Northern Endeavour FPSO in accordance with the accepted EP. TSOGA further stated that as the titleholder, TSOGA would be ultimately responsible for a hydrocarbon release and as such a TSOGA representative would have final signoff on all critical decisions.

While it is noted that the introduction of the current TSA adds a level of complexity, information available during the inspection indicates that the arrangements provided through the current TSA are equivalent to the arrangements presented in the accepted EP. Given this arrangement is currently in place the inspectors find that there is no current non-compliance with the EP or petroleum environmental law that results in a significant threat to the environment and that the activity is currently being undertaken in accordance with the accepted EP.

During the inspection, however, it became evident that TSOGA intended to amend the current TSA such that Exhibit A – Transitional Services - Part 1 operator services would be significantly amended. TSOGA provided a copy of the Final Draft Amendment Agreement No 2 TSA Dated 29 April 2016 (amended TSA) (Document 23). The inspectors found that the amendments to the current TSA were significant. For example, the amended TSA states that:

[s 47 business information](#)

The inspectors found that the proposed changes to the current TSA described in the amended TSA would result in significant changes to the arrangements in place to respond to a hydrocarbon release. As such, the inspectors focused on testing TSOGA's ability to demonstrate that equivalent arrangements would be in place subject to the amended TSA being enacted as described. The inspection focused on the

arrangements with third party service providers and access to adequately trained and competent personal.

3.1.2.2 Contractual arrangements with third party service providers

The inspection found the following:

- The EP states that the titleholder *“will continue to develop and maintain access to AMOSC services”*. The inspectors found that TSOGA have an executed Master Services Agreement with AMOSC in place (Document 5). This arrangement is equivalent to the arrangement detailed in the EP.
- The EP states that the titleholder *“will continue to develop and maintain access to AMSA services”*. The inspectors found that TSOGA had signed the MoU with AMSA (Document 24). This arrangement is equivalent to the arrangement detailed in the EP; however, TSOGA could not demonstrate that the arrangement had been fully executed as TSOGA had not received the signed copy from AMSA.
- The EP states that the titleholder *“will continue to develop and maintain access to OSRL services”*. The inspectors found that TSOGA does not have a contractual arrangement with OSRL. The EP states that the titleholder will have a Participating Membership contract with OSRL that allows access to specialized oil spill response equipment and trained and competent personal. TSOGA states that they have applied for the Associate Agreement, providing the application as proof of progress (Document 25). While the Associate Agreement is different to a Participating Membership the arrangement provides the same response capability. The arrangement, however, was not executed at the time of the inspection.
- The EP states that the titleholder *“has a s 47 business for the provision of a capping stack and SFRT equipment. s 47 business information is structured to provide the capping stack and associated equipment together with competent and experienced personnel to operate and deploy the equipment. The agreement provides for immediate availability of WWCI personnel upon call-out.”* TSOGA does not have an arrangement with s 47 for the provision of a capping stack and SFRT equipment. TSOGA states that they have a Master services Agreement (Document 27) with WWCI for access to people and services for relief well drilling only. TSOGA stated that they do not intend establishing a contact with WWCI for access to the capping stack and SFRT resources based on undocumented analysis that the WWCI Capping stack is not technically feasible for the activity. TSOGA states that they are currently negotiating with OSRL for Supplementary Services to access the SWIS Capping Stack System and Subsea Incident Response Toolkit (Singapore) on a short term bases (Document 26), however, this arrangement has not been established. Additionally TSOGA state that they have commenced discussions with Boots and Coots regarding potential options for accessing a smaller capping stack. The arrangement as detailed in the plan has not been executed and as such is not equivalent.
- The EP states that the titleholder *“has a contract arrangement with the AMOSC for access to the Australian Subsea First Response Toolkit (SFRT) equipment and dispersant stockpiles.”* This is an additional contract to the AMOSC Master Services Agreement. TSOGA does not have the additional membership arrangements required to access the Australian Subsea First Response Toolkit (SFRT) equipment from AMOSC and state that they do not intend to establish this contract. TSOGA states that if required, access will be granted under a pay as you go arrangement. TSOGA could not provide documented evidence that this arrangement is acceptable to AMOSC. The arrangement as detailed in the plan has not been executed and as such is not equivalent.
- The EP states that a *“Memorandum of Understanding for mutual assistance is in place among APPEA member signatories to facilitate the transfer of drilling units and well site services between titleholders in the event of emergency conditions that require the drilling of a single or multiple relief wells.”*

TSOGA has signed and completed the application to become a member of Australian Petroleum Production Exploration Association (APPEA) that will allow TSOGA to become a signatory to the APPEA MOU (Document 28). The application, however, will not be considered until 28 June 2016 at the next board meeting. TSOGA cannot become a signatory to the APPEA MoU until TSOGA has become an APPEA member. The arrangement is equivalent however it has not yet been fully executed.

- The EP states that *“Master services agreements will be in place with aviation companies to supply helicopters to offshore regions where is operating (in Australian Waters)”* and *“Arrangements are established for fixed wing aircraft”*. The inspectors found that TSOGA will have arrangements in place to access aviation services through the amended TSA (Document 23) and state that they are currently finalising direct contracts with providers. TSOGA states that the amended TSA arrangement would provide TSOGA the same arrangement that is currently contracted to the asset. TSOGA could not confirm that this arrangement is equivalent to the arrangements held by the previous titleholder. TSOGA stated that the arrangement is adequate; however, no documented evidence could be provided. TSOGA could not demonstrate that the arrangement would be equivalent.
- The EP states that the titleholder *“will maintain access to vessels via the Integrated Fleet”* TSOGA have an arrangement with Skilled Offshore that provides access to one offshore support vessel (Document 29). TSOGA states that Skilled Offshore has confirmed verbally that they can provide additional vessels. TSOGA state that they have requested a capability statement; however, this has not been received to date. TSOGA state that vessels of opportunities can be accessed via a broker. TSOGA have recently requested that Clarkssons (broker) provide information regarding availability of construction vessels only. TSOGA state that smaller vessels capable of undertaking offshore containment and recovery could be accessed via this mechanism. TSOGA states that they have done some analysis regarding the number of vessels required to undertake the predicted response activity, however, no documented evidence could be provided. TSOGA could not demonstrate that the arrangement in place is equivalent to the previous arrangement or if the arrangements are capable of providing access to the required resources.
- The EP states that the titleholder will *“continue to hold and maintain Contractual arrangement for road transportation services.”* The inspectors found that TSOGA have a contract with a road transport provider within Darwin (Document 32). TSOGA states that they have requested capability statement that included national services; however, this has not yet been received. TSOGA could not provide documented evidence to show that the arrangement in place is equivalent to previous arrangement or if the arrangement is capable of providing access to the required resources.
- The EP states that *“Master services agreements will be in place and maintained with waste management contractor for waste operations during a response”* The inspectors found that TSOGA have evidence of an arrangement in place with Civmec for waste management services (Document 33). TSOGA provided an email (Document 34) from the contractor stating that they can manage the waste volumes provided by TSOGA, however, could not demonstrate that the arrangement in place is equivalent to previous arrangement.
- The EP states that the Rapid assessment tool is *“integrated into information systems”* *“Provides early predictions of weathering, trajectory and persistence”* and should be *“immediately available to the ICC”*. The inspectors found that TSOGA will have access to the rapid assessment tool through the amended TSA. TSOGA state that they do not have direct access, however, access to the tool will be through previous titleholder. TSOGA state that they will be able to access the tool remotely via the internet. This was not inspected or tested for equivalency during the inspection.

- The EP states that the titleholder “has a service agreement with Kongsberg Satellite Services to provide satellite based maritime monitoring services to covers 47 Australian activities. The service agreement provides a 24/7 response service for acquiring, processing and delivery of satellite imagery to detect the presence of hydrocarbon spills on the sea-surface”. The inspectors found that TSOGA will have access to the equivalent arrangement through the amended TSA.
- The EP states that the titleholder has “a minor services agreement with RPS Asia Pacific ASA (RPS APASA) for the provision of oil spill trajectory modelling (OSTM) to cover Woodside’s Australian activities. A standing agreement is in place with RPS APASA for 24/7 OSTM support”. The inspectors found that TSOGA have a contract with APASA for oil spill trajectory modeling services. The arrangement is equivalent to the arrangement detailed in the EP.
- The EP states that the titleholders “Online Incident Management System (EMQnet) provides an electronic means to efficiently communicate, capture, track and manage issues in real-time”. TSOGA states that they do not have access to Incident Management Software EmQnet. TSOGA state that they have an internal paper based system with electronic logs. This was not inspected or tested for equivalency during the inspection.

3.1.2.3 Access to trained and competent personal

The inspection found the following:

- The EP states that the titleholders “Marine Oil Spill Preparedness Operating Standard defines the company’s minimum requirements for hydrocarbon spill preparedness. Specifically, this standard addresses the requirement to maintain people competencies to respond to a hydrocarbon spill”. TSOGA states that the former titleholder would not release the Operating Standard as it was a corporate document, however, minimum training and competency requirements are documented for each role in the Oil Pollution Emergency Arrangements (Australia) - Appendix D: Training and Competencies of Hydrocarbon Spill Response Roles.
- TSOGA state that they have direct access to 14 employees (TSOGA/UPS) that can potentially form an Incident Management Team.
 - Perth based –
 - TSOGA states that they have 6 employees that are capable and adequately trained to perform officer roles.
 - TSOGA states that they have 2 employees capable of performing the Incident Commander role; however, they do not meet the prescribed training requirements.
 - Melbourne based –
 - TSOGA states that they have 4 employees that are capable and adequately trained to perform at officer roles.
 - TSOGA states that they have 2 employees capable of performing the Incident Commander role; however, they do not meet the prescribed training requirements.

The inspectors did not inspect individual training and competency records to confirm individuals detailed meet requirements. TSOGA state that further training is planned for July 2016 to address training requirements identified.

- The EP states that that the titleholder will have “Access to internal and external oil spill response resources (people, services and equipment) will be available and commensurate to the level of risk resulting from the activity” and “would utilise the capability within its existing workforce, supplemented through the use of specialist service providers via AMOSC and OSRL.” TSOGA state that

the Marine Oil Spill Preparedness Operating Standard does not detail minimum personal requirements in relation to the minimum numbers of personal required (internal or external); however, this could not be confirmed. TSOGA state that they have not undertaken any documented analysis regarding the potential minimum numbers required to implement a response as described in the EP.

TSOGA state that they have not undertaken any documented analysis regarding the potential numbers of trained and competent personal that could be available through third party arrangements in the event of a spill. TSOGA states that:

- the former titleholder has stated that they would call off internal available trained resources; however, potential capability could not be confirmed.
- there are 130 trained and competent personal potentially available through AMOSC Core Group, however, this could not be confirmed, nor had TSOGA done any analysis as to how many would potential be available in the event of a spill.
- currently unable to confirm AMSAs and OSRL's capability in relation to providing trained and competent personal.
- potentially international personal could be accessed through AGR resources however TSOGA have not confirmed this arrangement.

TSOGA were unable to demonstrate that available resources (personal) are equivalent to the arrangements presented in the EP as they have not undertaken documented analysis to establish the minimum requirements or external capability available through third party providers.

3.1.2.4 Conclusion

The inspectors found that should TSOGA amend the current TSA in accordance with the amended TSA, TSOGA would not have equivalent arrangements in place to access oil spill response resources (equipment and personal) as described in the accepted EP. The amendment to the current TSA would result in TSOGA having an inadequate capability and capacity to support and sustain a protracted response resulting in short and long term biological, ecological and social harm in the event of an uncontrolled hydrocarbon release.

The inspectors found that should TSOGA amend the current TSA in accordance with the amended TSA TSOGA would be acting contrary to the accepted EP and be in breach of environmental law. Further, failure to maintain the oil spill response arrangements provided for by the current TSA would result in an immediate and significant threat to the environment.

3.1.3 Item 3: Compliance with Financial Assurance obligations under section 571 of the OPGGS Act

Inspectors examined documents and information to determine whether the titleholder had sufficient financial assurance in place as required by section 571 of the OPGGS Act and whether there was a system in place to ensure that sufficient financial assurance was maintained over the life of the title. This included inspection of:

- Financial assurance confirmation and declaration from the titleholder;
- Documents detailing the amount of financial assurance required and amount of assurance in place; and
- Processes and systems for maintaining financial assurance.

3.1.3.1 Maintaining financial assurance

Section 571(2) of the OPGGA Act states:

“The titleholder must, at all times while the title is in force, maintain financial assurance sufficient to give the titleholder the capacity to meet costs, expenses and liabilities arising in connection with, or as a result of:

- (a) the carrying out of the petroleum activity; or*
- (b) the doing of any other thing for the purposes of the petroleum activity; or*
- (c) complying (or failing to comply) with a requirement under this Act, or a legislative instrument under this Act, in relation to the petroleum activity.”*

Inspectors requested documents and information to determine whether TSOGA had a system in place to maintain sufficient financial assurance over the life of the activity. In particular, that financial assurance held by TSOGA would be current and valid and that there was a process that provided for a review of the financial assurance required in the event there was a change to activities conducted on the title.

TSOGA advised that they engage an insurance broker to arrange and renew their insurances and provided Letter of Engagement – [s 22](#) (Document 21) as evidence of this arrangement. In addition, TSOGA advised that it was the role and responsibility of the Chief Financial Officer to identify any new insurance needs on a project by project basis. Inspectors requested information or documents to determine if the requirement to identify any new insurance was documented or whether there is a documented process or system for the review of whether there was sufficient financial assurance provided for over time. When asked, TSOGA were unable to provide evidence of a documented procedure or process which required a check of whether the financial assurances were still sufficient for the life of the activities conducted on the title.

Recommendation 1438-6
Ensure that there are documented systems or procedures, with appropriate triggers, for the review of financial assurance over the life of the activities conducted on the title to ensure that it is sufficient as required by section 571(2) of the OPGGS Act.

4 Report Close-out

It is NOPSEMA’s expectation that the titleholder considers the findings detailed in this inspection report, and acts upon them. Recommendations identified in this report may also be considered during future petroleum environmental inspections undertaken by NOPSEMA.

Attachment A – Meetings

An inspection opening meeting was held on 2 June 2016.

An inspection closing meeting was held on 30 June 2016.

Attendees at the opening and closing meetings were as follows:

Name	Company	Position	Opening	Closing
s 22 irrelevant material	NOGA	s 47 business information	✓	✗
	NOGA		✓	✓
	NOGA		✓	✗
	NOPSEMA	Inspector	✓	✓
	NOPSEMA	Inspector	✓	✓

Attachment B – Documentation inspected

No.	Title, Document Number and Revision Number
1	Hazard Identification and Risk Management Rev 0
2	Change Management Rev 0
3	Operating Management System Elements Rev 1
4	NOGA Financial Assurance Estimate
5	AMOSC - Master Service Contract - fully executed
6	Emergency Response Plan - Northern Endeavour Bridging Document
7	MOC Form s 47 business information
8	Inspection Plan
9	Oil Spill Contracts
10	Env Aspects and Impacts Register
11	Oil Spill Competency Dashboard
12	Oil Spill Preparedness and Response Mitigation
13	Financial Assurance Confirmation - Timor Sea Oil and Gas - Northern Endeavour EP
14	Transition Services Agreement between TOGA and s 47
15	Financial Assurance Declaration - Timor Sea Oil and Gas – AC/L5
16	Presentation - NOGA on behalf of Timor Sea Oil and Gas Australia (TOGA) Environment Inspection Induction June 2016
17	EP OPEP Table Change Management - 20160531
18	Stakeholder Engagement Announcement 1 160601
19	Oil Spill Preparedness Competency Matrix
20	Incident Reporting and Investigation Procedure
21	Letter of Engagement - s 22
22	Northern Endeavour Draft Audit Schedule
23	Final Draft Amendment Agreement No 2 TSA Dated 29 April 2016
24	AMSA MOU Signed NOGA
25	Email – OSRL Associate Agreement Application 22 June 2016
26	Email – Inquiry for SWIS Membership 14 June 2016
27	Master Services Agreement NOGA and Wild Well Control 1 June 2016
28	APPEA Application Letter

No.	Title, Document Number and Revision Number
29	Novation Agreement for s 47 business to NOGA
30	Email - Vessel examples from Clarksons
31	EP OPEP Table Change Management 21 June 2016
32	Novation Agreement for s 22 irrelevant to NOGA
33	Recommendation for Award – Civmec Construction and Engineering
34	Email – Civmec waste handling capacity
35	Purchase Order - RPS APASA Pty Ltd
36	Emergency Response Bridging Plan Northern Endeavour, Draft Revision 0 June 2016
37	Operations and Maintenance Services Agreement