

PMA-BHP-EN-EIA-0005



MACEDON GAS PROJECT Compliance Assessment Report

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COVER

Photograph on cover of report shows the site for the Macedon Gas Plant

Rev	Date	Description	Author	Checker	Approver
0	19 Jan 12	Issued to EPA	A. McTaggart	S. Jeffcote	G Walker
1	14 Jan 13	Issued to EPA	A. McTaggart	S. Jeffcote	S Drouaud

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None Required

1.0 INTRODUCTION

The Macedon Gas Development is a domestic gas project designed to exploit the gas reserves in the offshore Macedon gas field located in Production Lease WA-42-L.

The project comprises the connection of the Macedon field via a subsea pipeline to an onshore gas treatment and compression plant located in an area proposed for strategic industrial use at Ashburton North (Ashburton North) located approximately 17 km southwest of Onslow, and a sales gas pipeline which follows the Onslow Road to the Dampier to Bunbury Natural Gas Pipeline (DBNGP, Figure 1).

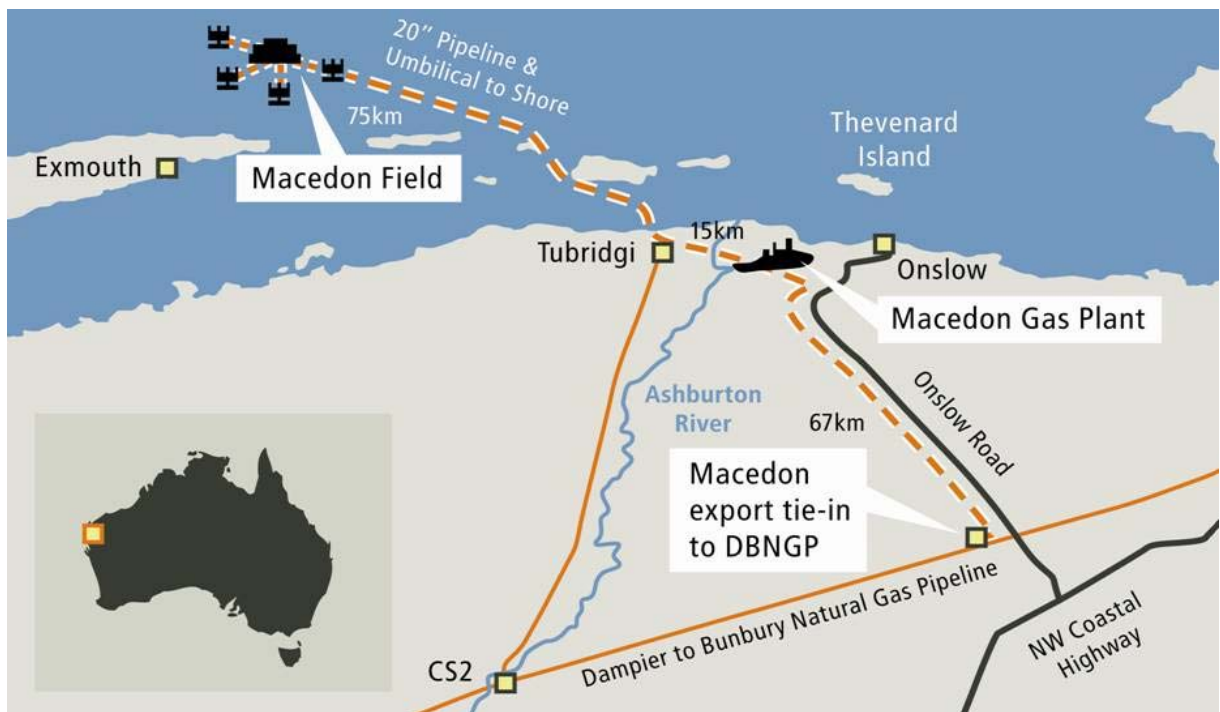


Figure 1 Macedon Gas Project Location

The Macedon Gas Plant Lease area for the gas processing facility and associated infrastructure, including the ground flares and evaporation pond, construction lay down areas and construction accommodation areas is shown in Figure 2.



Figure 2 Macedon Gas Plant Lease and Layout

1.1 Purpose of the Compliance Assessment Report

The purpose of the Compliance Assessment Report is to assess compliance with EPA (WA) Statement 844 dated 28 October 2010 in accordance with the Compliance Assessment Plan approved 18 March 2011.

The Compliance Assessment Report 2012 covers activities undertaken during the period 1st January 2012 to 31st December 2012.

1.2 Compliance Assessment Reporting Requirements

The Compliance Assessment Reporting Requirements are as defined in Compliance Assessment Plan (PMA-BHP-EN-EIA-0002, Rev 3, 14.01.13). This report complies with the compliance reporting requirements.

1.3 Endorsement of CAR

This Compliance Assessment Report has been endorsed by Mike Kelly, BHPB Petroleum Country Manager for Australia.

2.0 Project Status

2.1 Current Status of Project (construction, operation, etc.)

The project is currently under construction. Construction is planned to be completed in Q2 2013.

2.2 Project Activities covered by CAR

This CAR covers the following project activities undertaken in the period 1st January 2012 to 31st December 2012:

1. Construction of the access road.
2. Installation of wet gas pipeline from shore to gas processing plant.
3. Installation of sales gas pipeline from gas processing plant to Dampier to Bunbury pipeline.
4. Earthworks and commencement of civil works for the gas processing plant.
5. Structural, mechanical and piping installation commencement.
6. Commencement of electrical and instrumentation installation.

3.0 Compliance with Ministerial Statement 844

3.1 Compliance with Conditions

Current construction works on site are all compliant with Ministerial Statement No. 844 as reported in Table 1.

3.2 Rehabilitation Monitoring

The Macedon Gas Project is still in the construction phase and rehabilitation of the onshore pipeline has been completed. Remaining temporarily disturbed areas have not yet been rehabilitated. Rehabilitation monitoring will commence in May 2013.

3.3 Greenhouse gas

3.3.1 GHG Emissions and Intensity

No emissions to report as the gas plant is not operational.

3.3.2 GHG Reduction Measure Investigated

No emissions to report as the gas plant is not operational.

3.3.3 GHG Reduction Measure Implemented

No emissions to report as the gas plant is not operational.

4.0 Audit table

Table 1 Audit tables

Audit Code	Subject	Action (from Ministerial Statement 844)	How	Evidence	Satisfy	Advice	Phase	When	Status
844:M1.1	Implementation	The proponent shall implement the proposal as documented and described in schedule 1 of this statement subject to the conditions and procedures of this statement.	Project implemented in accordance with these criteria	Compliance Assessment Report (CAR)	Min for Env		Overall		Project in construction
844:M2.1	Proponent Nomination and Contact Details	The proponent for the time being nominated by the Minister under sections 38(6) or 38(7) of the Act is responsible for the implementation of the proposal.			Min for Env		Overall		No change
844:M2.2	Proponent Nomination and Contact Details	The proponent shall notify the CEO of any change of the name and address of the proponent for the serving of notices or other correspondence within 30 days of such change.	Letter notifying CEO of any change in proponent details	Letter notifying CEO of any change in proponent details	CEO		Overall	Within 30 days of such change	Updated January 2013
844:M3.1	Time Limit of Authorisation	The authorisation to implement the proposal provided for in this statement shall lapse and be void five years after the date of this statement if the proposal to which this statement relates is not substantially commenced.	Implement project		Min for Env		Overall	Commence implementation by 27 October 2015	Completed - Implementation commenced in 2011
844:M3.2	Time Limit of Authorisation	The proponent shall provide the CEO with written evidence which demonstrates that the proposal has substantially commenced on or before the expiration of five years from the date of this statement.	Letter notifying CEO that proposal has substantially commenced	Letter to the CEO demonstrating that the proposal has substantially commenced	CEO		Overall	Within one month of commencement	Completed – Letter sent to CEO dated 16.01.12
844:M4.1	Compliance Reporting	The proponent shall prepare and maintain a compliance assessment plan (CAP) to the satisfaction of the CEO.	CAP will be developed prior to implementation and maintained	CAP	CEO		Overall	Prior to implementation and ongoing	Completed
844:M4.2	Compliance Reporting	The proponent shall submit to the CEO the CAP required by condition 4-1 at least six months prior to the first compliance report required by condition 4-6, or prior to implementation, whichever is sooner. The CAP shall indicate: 1 the frequency of compliance reporting; 2 the approach and timing of compliance assessments; 3 the retention of compliance assessments; 4 the method of reporting of potential non-compliances and corrective actions taken; 5 the table of contents of compliance assessment reports; and 6 public availability of compliance assessment reports.	CAP will be developed prior to implementation and submitted to CEO	CAP	CEO		Pre-construction	At least six months prior to the first CAR required by Condition 4-6, or prior to implementation, whichever is sooner	Approval of CAP received from CEO of EPA in letter dated 18.03.11
844:M4.3	Compliance Reporting	The proponent shall assess compliance with conditions in accordance with the CAP required by condition 4-1.	Prepare Compliance Assessment Report (CAR)	CAR	Min for Env		Overall	When requested by the CEO	2011 CAR 2012 CAR (this document)
844:M4.4	Compliance Reporting	The proponent shall retain reports of all compliance assessments described in the CAP required by condition 4-1 and shall make those reports available when requested by the CEO.	CAR to include compliance assessments (audit table), retain CAR for the life of the project in electronic and hard copy format	CAR	CEO		Overall	Annual	2011 CAR 2012 CAR (this document)
844:M4.5	Compliance Reporting	The proponent shall advise the CEO of any potential non-compliance within seven days of that	Advise CEO of potential non-compliance in writing	Log of phone call, email or letter	CEO		Overall	Within seven days of that non-compliance	No non-compliances

Audit Code	Subject	Action (from Ministerial Statement 844)	How	Evidence	Satisfy	Advice	Phase	When	Status
844:M4.6	Compliance Reporting	<p>The proponent shall submit to the CEO the first CAR fifteen months from the date of issue of this Statement addressing the twelve month period from the date of issue of this Statement and then annually from the date of submission of the first CAR.</p> <p>The CAR shall: 1 be endorsed by the proponent's Managing Director or a person delegated to sign on the Managing Director's behalf; 2 include a statement as to whether the proponent has complied with the conditions; 3 identify all potential non-compliances and describe corrective and preventative actions taken; 4 be made publicly available in accordance with the approved CAP; and 5 indicate any proposed changes to the CAP required by condition 4-1.</p>	<p>CAR will be issued</p> <p>Make CAR publicly available in accordance with 'Proposal Implementation Monitoring Branch – Draft Fact Sheet 1 – Making Documents Publicly Available – April 2010'</p>	CAR	CEO		Overall	Annually by 28 January each year with the first CAR due 28 January 2012	2011 CAR 2012 CAR (this document)
844:M5.1	Non-Indigenous Marine Species	Prior to mobilisation of vessels and submersible equipment for the construction of the Macedon Gas Project marine pipeline and umbilical, the proponent shall update the Introduced Marine Pest Management Procedure contained in Appendix Q of the Final EPS to be consistent with the Commonwealth and State guidelines approved and published at that time, to the satisfaction of the CEO on advice from the Department of Fisheries.	Revise and obtain approval of Introduced Marine Pest Management Procedure (IMP MP)	IMP MP	CEO	DoF	Pre-construction	Prior to mobilisation of vessels and submersible equipment for the construction of the Macedon Gas Project marine pipeline and umbilical	Letter of Approval from CEO of EPA received 28.11.11
844:M5.2	Non-Indigenous Marine Species	The proponent shall implement the updated Introduced Marine Pest Management Procedure for the construction and maintenance of the Macedon Gas Project marine pipeline and umbilical.	Offshore pipelay and maintenance implemented in compliance with IMP MP	Inspection of IMP MP vessel risk assessments, certificates of vessel cleanliness	Min for Env		Overall	For the construction and maintenance of the Macedon Gas Project marine pipeline and umbilical	IMP MP implemented
844:M6.1	Marine Fauna	The proponent shall not cause physical damage to turtles, disrupt turtle nesting behaviour or cause a change to hatchling orientation in waters and/or beaches adjacent to the pipeline shore crossing during construction.	Implement Marine Turtle Impacts Management Protocol (MTI MP)	Implementation of MTI MP, Marine Fauna Observer logs	Min for Env		Construction	During construction	Shore crossing complete, no impacts to marine turtles recorded

Audit Code	Subject	Action (from Ministerial Statement 844)	How	Evidence	Satisfy	Advice	Phase	When	Status
844:M6.2	Marine Fauna	If the pipeline shore crossing is to take place between 1 November and 30 April the proponent shall prepare a MTI MP to the satisfaction of the CEO on advice from the DEC prior to undertaking the shore crossing. The protocol shall include: 1. employment of a suitably qualified marine fauna observer; 2. indicators for determining if and when there is potential for impacts on turtle nesting or hatchling emergence; 3. management responses to evidence of turtle activity; and 4. triggers for stopping construction activities pending further consultation with the DEC; and 5. when resumption of activities can take place, on advice of the DEC.	Prepare MTI MP	Approval of MTI MP	CEO	DEC	Construction	Prior to undertaking the shore crossing, if the pipeline shore crossing is to take place between 1 November and 30 April	Letter of Approval from CEO of EPA received 31.10.11
844:M6.3	Marine Fauna	The proponent shall implement the MTI MP if undertaking the pipeline shore crossing between 1 November and 30 April.	Implement MTI MP	Marine Fauna Observer logs	Min for Env		Construction	If undertaking the pipeline shore crossing location between 1 November and 30 April	MTI MP implemented for shore crossing
844:M6.1A	Pipeline Route – State waters	Subject to complying with the separation distances in condition 7-1, the pipeline within State waters shall be laid/constructed within the corridor delineated by the coordinates specified in Schedule 2.	Install pipeline in corridor delineated in Schedule 2	Pipelay vessel logs, as-built survey of route	Min for Env		Construction	During offshore pipeline construction	Construction 70% complete, expected completion 2013
844:M7.1	Benthic Primary Producer Habitat	The proponent shall undertake all works in a manner that ensures that the loss of Benthic Primary Producer Habitat (BPPH) within the Local Assessment Area, as defined in Figure 3, does not exceed 1% for any habitat type and is minimised by maintaining the following separation distances during construction of the marine pipeline and umbilical : (1) pipeline to primary feature – 700 metres; (2) pipeline to secondary feature – 600 metres; (3) vessel movement/anchor to primary feature – 200 metres; and (4) vessel movement/anchor to secondary feature – 100 metres. Note: “loss” is loss that does not recover within 5 years, “primary feature” and “secondary feature” are as defined in Figure 18 of the Final EPS and not a feature for which proposed impacts are described in section 8.4.4.5 of the Final EPS.	Maintain separation distance during offshore pipelay as per Condition 7-1	Pipelay vessel logs, as-built survey of route, BPPH survey and loss calculations	Min for Env		Construction	During offshore pipeline construction	Construction 70% complete, expected completion 2013
844:M7.2	Benthic Primary Producer Habitat	The proponent shall survey the direct loss of BPPH against the criteria in condition 7-1 starting within one month of completion of the marine pipeline and umbilical.	Survey and calculate loss of BPPH	Post construction as built survey of route, BPPH survey and loss calculations	Min for Env		Overall	Commencing within one month of completion of the marine pipeline and umbilical	Construction 70% complete, expected completion 2013

Audit Code	Subject	Action (from Ministerial Statement 844)	How	Evidence	Satisfy	Advice	Phase	When	Status
844:M7.3	Benthic Primary Producer Habitat	Notwithstanding condition 7-1, if monitoring detects that construction activities have contributed to a loss of greater than 1% in any habitat type within the management unit, as defined in Figure 3, the proponent shall notify the CEO of the strategies to be implemented to enhance recovery and rehabilitate the impacted BPPH.	Develop strategies for recovery and rehabilitation of BPPH	Post construction as-built survey, strategies	CEO		Overall	If monitoring detects that construction activities have contributed to a loss greater than 1% in any habitat type within the management unit, as defined in Figure 3	Construction 70% complete, expected completion 2013
844:M8.1	Terrestrial Vegetation	<p>Within two months following completion of construction of the gas plant and associated pipelines, the proponent shall commence rehabilitation of the temporarily cleared areas of the site that are no longer being utilised to achieve re-establishment of vegetation, such that the following criteria are met across the distribution of the disturbance footprint within three years of commencement of rehabilitation:</p> <p>(1) Species diversity is not less than 60 percent of the known original species diversity; (2) Weed coverage is equal to or less than that of pre-cleared levels.</p> <p>Note: The original species diversity and weed coverage must be determined prior to clearing or from analogue sites approved by the CEO on advice from the DEC.</p>	Undertake rehabilitation of temporarily cleared areas (gas plant and pipelines) as per Condition 8-1	Rehabilitation monitoring reports, rehabilitation completion criteria: <ul style="list-style-type: none"> - Species diversity greater than 60%of pre-disturbance - Weed coverage less than pre-disturbance levels 	CEO	DEC	Overall	Commence rehabilitation within two months following completion of construction of the gas plant and associated pipelines and meet criteria within three years of commencement of rehabilitation	Pipeline rehabilitation complete. Monitoring report developed, monitoring to commence Q2 2013
844:M8.2	Terrestrial Vegetation	In liaison with the DEC, the proponent shall monitor progressively the performance of rehabilitation for a range of sites against the criteria in condition 8-1 based on appropriately timed surveys after rain, until the completion criteria are met. The surveys shall be conducted annually unless otherwise agreed by the CEO.	Monitor rehabilitation success against rehabilitation completion criteria, conduct surveys in accordance with Condition 8-2	Rehabilitation monitoring report, rehabilitation completion criteria: <ul style="list-style-type: none"> - Species diversity greater than 60%of pre-disturbance - Weed coverage less than pre-disturbance levels Correspondence with DEC	CEO	DEC	Overall	Appropriately timed after rain on an annual basis unless otherwise agreed by the CEO until the completion criteria are met	Monitoring report developed, monitoring to commence Q2 2013
844:M8.3	Terrestrial Vegetation	<p>The proponent shall include a rehabilitation monitoring report in the CAR referred to in condition 4-6 commencing from the date rehabilitation was commenced. The report shall address in the report the following:</p> <p>1. The progress made towards meeting the criteria required by condition 8-1; and 2. Contingency management measures in the event that the criteria required by condition 8-1 are unlikely to be met.</p>	Submit rehabilitation monitoring report	Rehabilitation monitoring report, rehabilitation completion criteria: <ul style="list-style-type: none"> - Species diversity greater than 60%of pre-disturbance - Weed coverage less than pre-disturbance levels 	Min for Env		Overall	Commencing from the date rehabilitation was commenced and on an annual basis	Monitoring report developed, monitoring to commence Q2 2013

Audit Code	Subject	Action (from Ministerial Statement 844)	How	Evidence	Satisfy	Advice	Phase	When	Status
844:M9.1	Terrestrial Fauna	The proponent shall prevent the death of fauna that becomes entrapped in the onshore pipeline trenches by employing a fauna clearing person or persons to remove trapped fauna from any open pipeline trench.	Fauna clearing person(s) to remove fauna from open pipeline trench	Employment of fauna clearing person(s), daily logs	Min for Env		Construction	Until all trenching is completed and no open pipeline trenches remain	Trenching complete. No loss of fauna during pipeline construction. Small losses due to groundwater flooding in trenches
844:M9.2	Terrestrial Fauna	The length of open trenches shall not exceed a length capable of being inspected and cleared by a fauna clearing person within the time frame specified in condition 9-4.	Clear open trench within identified timeframes specified in Condition 9-4	Employment of fauna clearing person(s), daily logs	Min for Env		Construction	Until all trenching is completed and no open pipeline trenches remain	Trenching complete
844:M9.3	Terrestrial Fauna	Fauna refuges providing suitable shelter from the sun and predators for trapped fauna shall be placed in the trench at intervals not exceeding 50 metres.	Fauna refuges installed in open trench at intervals < 50m	Daily logs	Min for Env		Construction	Until all trenching is completed and no open pipeline trenches remain	Trenching complete
844:M9.4	Terrestrial Fauna	Inspection and clearing of fauna from trenches by a fauna clearing person shall occur twice daily and not more than half an hour prior to the backfilling of trenches, with the first daily inspection and clearing to be undertaken no later than 3.5 hours after sunrise, and the second inspection and clearing to be undertaken daily between the hours of 3:00 pm and 6:00 pm.	Clear open trench within identified timeframes	Employment of fauna clearing person(s), daily logs	Min for Env		Construction	Twice daily and not more than half an hour prior to the backfilling of trenches, with the first daily inspection and clearing to be undertaken no later than 3.5 hours after sunrise, and the second inspection and clearing to be undertaken daily between the hours of 3:00 pm and 6:00 pm	Trenching complete. No loss of fauna during pipeline construction. Small losses due to groundwater flooding in trenches
844:M9.5	Terrestrial Fauna	In the event of rainfall, the proponent shall, following the clearing of fauna from the trench, pump out significant pooled water in the open trench (with the exception of groundwater) and discharge it to adjacent vegetated areas in a manner that does not cause erosion.	Pump out significant pooled water in open trench	Daily logs	Min for Env		Construction	In the event of rainfall, following the clearing of fauna from the trench	Trenching complete. No loss of fauna during pipeline construction. Small losses due to groundwater flooding in trenches
844:M10.1	Emissions to Air	The proponent shall install equipment and manage ongoing operations such that best practice for a petroleum gas/condensate facility in respect to volatile organic compounds and oxides of nitrogen emissions is achieved.	Install equipment as detailed in Air Emissions Best Practice Report (AEBPR) and manage ongoing operations	Approved AEBPR, CAR	Min for Env		Overall	Construction and ongoing operations	Operation phase not yet commenced
844:M10.2	Emissions to Air	The proponent shall provide reports showing the basis on which 'best practice' was determined, to the satisfaction of the CEO, as follows: 1. for plant and equipment – prior to applying for a Works Approval under Part V of the Act; and 2. for ongoing management of operations – prior to applying for a Licence under Part V of the Act.	Prepare AEBPR for selection of equipment and ongoing management of operations	Approved AEBPR, CAR	CEO		Overall	Prior to applying for a Works Approval (for plant and equipment) and prior to applying for a Part V licence (for ongoing management of operations)	Approval of AEBPR received from CEO of EPA in letter dated 07.07.11

Audit Code	Subject	Action (from Ministerial Statement 844)	How	Evidence	Satisfy	Advice	Phase	When	Status
844:M11.1	Greenhouse Gas Abatement	For the life of the project, the proponent shall include in the CARs referred to in Condition 4-6 the following: 1. annual greenhouse gas emissions and intensity resulting from the operation of the project in comparison to the annual emissions predicted in the Final EPS and reasons for any variance; 2. details of improvements in equipment, technology or procedures investigated by the proponent that would reduce greenhouse gas emissions; and 3. details of improvements in equipment, technology or procedures implemented by the proponent that will reduce greenhouse gas emissions.	CAR to include GHG emissions and intensity (including comparison to annual emissions predicted in the Final EPS and reasons for any variance) and proposed and implemented GHG reduction methods	CAR	Min for Env		Operation	For the life of the project	Operation phase not yet commenced
844:M12.1	Decommissioning	At least six months prior to the anticipated date of closure, the proponent shall submit a Final Decommissioning Plan designed to ensure that the site is suitable for future land uses, for approval of the CEO. The Final Decommissioning Plan shall set out procedures and measures for: 1. removal or, if appropriate, retention of plant and infrastructure; and 2. remediation or rehabilitation of all disturbed areas to a standard suitable for the agreed new land use(s).	Submit Final Decommissioning Plan	Approval of Final Decommissioning Plan	CEO		Operation	At least six months prior to the anticipated date of closure	Not yet commenced
844:M12.2	Decommissioning	The proponent shall implement the Final Decommissioning Plan required by condition 12-1 from the date of closure until such time as the Minister determines, on advice of the CEO, that the proponent's decommissioning responsibilities have been fulfilled.	Implement Final Decommissioning Plan	Decommissioning and rehabilitation monitoring reports	Min for Env	CEO	Decommissioning	From the date of closure until such time as the Minister determines, on advice of the CEO, the proponent's decommissioning responsibilities have been fulfilled	Not yet commenced
844:M12.3	Decommissioning	The proponent shall make the Final Decommissioning Plan required by condition 12-1 publicly available in a manner approved by the CEO.	Make Final Decommissioning Plan publicly available	Final Decommissioning Plan available as directed by CEO	CEO		Overall	Within two weeks of receiving approval for the final Decommissioning Plan	Not yet commenced

Note:

- Phases that apply in this table = **Pre-construction, Construction, Operation, Decommissioning, Overall (several phases)**
- This audit table is a summary and timetable of conditions and commitments applying to this project. Refer to the Minister's Statement for full detail/precise wording of individual elements
- Code prefixes: M = Minister's condition; P = Proponent's commitment; A= Audit specification; N= Procedure
- Any elements with status = "Audited by proponent only" are legally binding but are not required to be addressed specifically in compliance reports, if complied with
- Acronyms list:- Min for Env = Minister for the Environment; CEO = Chief Executive Officer of OEPA; OEPA = Office of the Environmental Protection Authority; EPA = Environmental Protection Authority; DEC = Department of Environment and Conservation; DMP = Department of Mines and Petroleum; DoH = Department of Health; DoF = Department of Fisheries

5.0 Non-compliance and Corrective/Preventative Actions

There have no non-compliances during the reporting period.

6.0 Changes to the Compliance Assessment Plan

The following changes are proposed in the Compliance Plan:

1. Change proponent address details from “Central Park 152 – 158 St Georges Terrace” to “125 St Georges Terrace”.
2. Change key contact from Garry Walker to Stephan Drouaud

7.0 References

BHP Billiton Petroleum 2010. Macedon Gas Project Environmental Protection Statement, July 2010 – Final. BHP Billiton Petroleum, Perth.

BHP Billiton Petroleum 2011. Macedon Gas Project Compliance Assessment Plan, Rev 3, 14.01.13. BHP Billiton Petroleum, Perth.

BHP Billiton Petroleum 2012, Macedon Gas Project Compliance Assessment Report 2011, Rev 0, 19.01.12, BHP Billiton Petroleum, Perth.

