

Banksia Beach Borefield

Annual Compliance Report 2016-2017

1st December 2017



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Executive Summary

This annual compliance report is the second compliance report on the operation and management of the Banksia Beach Water Treatment Plant and Borefield under the Borefield Environmental Management Plan (BEMP) and addresses the requirements of conditions applied to the project under the *Environmental Protection and Biodiversity Conservation Act 1999* (EPBC Act). This report addresses compliance with the conditions of approval between the 1st September 2016 and 31st August 2017.

A detailed review of the previous monitoring program, incorporating the recommendations of the three year review and the subsequent GDE orientated review of the monitoring network, was presented to the Commonwealth Department of the Environment (DotE) in January 2014. The EPBC approval 2007/3396 was updated and approved to reflect the changes to the BEMP with the new approval conditions activated on the 17th April 2015. On the 3rd of August 2015 Seqwater submitted the updated and revised BEMP to DotE and was approved by DotE on the 18th August 2015.

During this reporting period (2016–2017) all 6 conditions for the controlled action were active. The Banksia Beach Water Treatment Plant has not been operational since April 2014 and has subsequently triggered the cold standby shutdown (shutdown >12months) monitoring and sampling regime as outlined within the BEMP. Therefore no extraction from the borefield has occurred. The conditions active during this reporting period (2016–2017) have been assessed for compliance. A summary of the results is presented in Table 1 and more detailed descriptions of the compliance assessment are presented in Sections 2.1 - 2.7.

The outcomes of the compliance assessment indicate no instances during this reporting period of any significant impact on EPBC Act listed species. Further, no incidents requiring notification to DotE have occurred during this reporting period (2016–2017). All ongoing active EPBC conditions of approval will continue to be implemented and audited during the operational phase of Banksia Beach Water Treatment Plant and Borefield.

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1. Introduction

The Queensland Government mandated the implementation of a series of water infrastructure projects as part of a regional drought management strategy in response to the millennium drought (2001-2009) and the lack of security of potable water supplies in South East Queensland (SEQ).

In 2006, a new Part 8 was inserted in the *Water Regulation 2002*, which outlined measures to be undertaken and outcomes to be achieved by service providers to ensure security of essential water supplies for the SEQ Region. One of the specified measures was the development of underground water resources at Bribie Island and in the area around Brisbane. Schedule 10B of the *Water Regulation 2002* required that this measure with respect to Bribie Island be completed by 31 December 2007, with the initial outcome of 10 megalitres (ML) of water production per day.

Investigation of the aquifer and groundwater modelling for Bribie Island clearly demonstrated that the sustainable combined production level at the proposed Banksia Beach water treatment plant (WTP) and the then existing Woorim WTP is limited to about 8 ML/d. The Queensland Government acknowledged this and the proposed extraction rate for the northern and southern borefields was formally revised on the 2nd November 2007 to 5 ML/day.

The Banksia Beach WTP was therefore developed for production of water not exceeding 4.32 ML/day (annual daily average) at a maximum daily rate of 5ML/day and totalling no more than 1580ML/year. The WTP sources water from the associated northern borefield via a reticulation pipeline to convey water extracted from the lower (regional) sand mass aquifer. The WTP at Woorim was decommissioned in 2008 by Seqwater due to poor infrastructure condition and poor source water quality to the plant. The balance of supply to Bribie Island is dictated by the regional supply model which outlines the supply and bulk water transfer arrangements intended to meet forecast demands, water security and cost. This plan ensures supply on the island is adequately met via the Banksia Beach WTP, the bulk water supply network or a combination of the two depending on the current grid arrangement.

As this development lies in close proximity to a site of national environmental significance, namely the Moreton Bay Ramsar Wetland, the project was referred to the Commonwealth

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Department of the Environment and Water Resources (DEWR) (Subsequent to the Referral the Department of the Environment, Water, Heritage and the Arts (DEWHA) pursuant to the *Environment Protection and Biodiversity Conservation Act 1999* (Cth) (EPBC Act).

Subsequently, DEWHA became the Department of Sustainability, Environment, Water, Populations and Communities - DSEWPaC, then, as of September 2013, became the Department of the Environment (DotE). The EPBC Act referral comprised a comprehensive Review of Environmental Factors (REF). The DEWHA subsequently declared the project a controlled action under the *EPBC Act section 95a* under the controlling provision – Wetlands of international importance (sections 16 and 17B).

2. Conditions of Compliance

To demonstrate compliance with the individual EPBC Act conditions of approval, Table 1 includes each condition number as per the controlled action approval notice of 17 April 2015. For Table 1, the status of the condition compliance is provided as well as a summary of condition compliance status. Further details of compliance status have been provided in the below table. Please note that in some instances the conditions presented in Table 1 have been separated into lettered bullet points for ease of reference and the visual presentation of the conditions may differ to the determination notice.

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Table 1: Reference Table for EPBC Act Controlled Action Conditions

Condition Number	Condition/Requirement	Status	Compliance assessment
EPBC 1	The approval holder must submit for approval by the Minister a BEMP designed to protect the ecological character of the Moreton Bay Ramsar wetlands. Once approved, the BEMP must be implemented. The approved BEMP must be published on the approval holder's website, with a location and/or metadata that enables easy discovery by relevant web searches, within one month of approval by the Minister. The approval holder must notify the Department within 5 business days of publishing the BEMP on its website. The BEMP must remain on the website for the period the approval has effect.	Ongoing	Compliant.
EPBC 2	In accordance with the yield identified in the BEMP, the approval holder must limit groundwater extraction from the Northern Borefield to no greater than an annual average of 4.32ML/day, at a maximum daily rate of 5ML/day and totalling no more than 1580ML/year, subject to the requirements of conditions 1, 4 and 5.	Ongoing	Compliant.
EPBC 3	The approval holder must maintain accurate records of all measures taken to implement the BEMP according to conditions of this approval, and must make these records available to the Department on request. Within 3 months of every anniversary of the commencement of the action, the approval holder must publish a Compliance Report on its website addressing the implementation of the BEMP. The approval holder must also notify of any non-compliance with this approval to the Department in writing within 10 business days of becoming aware of the non-compliance. The approval holder must continue to annually publish the Compliance Report until such time as agreed in writing by the Minister. Such records may be subject to audit by the Department or be used to verify compliance with the conditions of the approval.	Ongoing	Compliant.
EPBC 4	If the approval holder wishes to carry out any activity otherwise than in accordance with the BEMP, the person taking the action must submit to the Department for the Minister's written approval a revised version of the BEMP. The varied activity shall not commence until the Minister has approved the revised plan in writing. If the Minister approves the revised plan, that plan must be implemented in place of the plan originally approved. All revised plans approved by the Minister must be published on the approval holder's website within one month of their approval by the Minister.	Noted – general obligation condition	Compliant.
EPBC 5	If the Minister believes that it is necessary or convenient for the better protection of the relevant matters of environmental significance to do so, the Minister may request the approval holder to make specific revisions to the BEMP and submit the revised plan for the Minister's written approval. Once approved, the revised plan must be implemented. Unless the Minister has approved the revised plan, the approval holder must continue to implement the originally approved BEMP, as specified in the conditions.	Noted – general obligation condition	Compliant.
EPBC 6	Upon the direction of the Minister, the approval holder must ensure that an independent audit of compliance with the conditions of approval is conducted and a report submitted to the Minister. The independent auditor and audit criteria must be approved by the Minister prior to the commencement of the audit. The audit report must address the criteria to the satisfaction of the Minister.	Noted – general obligation condition	Compliant.

2.1 EPBC Condition 1

On the 3rd of August 2015 Seqwater submitted the updated and revised BEMP, designed to protect the ecological character of the Moreton Bay Ramsar wetlands, and was approved by DotE on the 18th August 2015. Implementation of the specific monitoring programs and other requirements can be found in section 3.

The BEMP was amended in February/March 2016 to include changes when the BBWTP is in cold standby shutdown (shutdown >12months) which are;

- No quarterly operational reports
- No CRG meetings unless specific issues arise
- No SWL and EC monitoring
- No quarterly assessment of meteorological data

Continuation of vegetation transects surveys, soil moisture monitoring and NDVI will occur until baseline is established (Note: baseline established once information from any future differential changes can be statistically assessed).

The changes to the monitoring requirements in the BEMP published on Seqwater's website on the 30th March 2016 within one month of receiving approval from DotE (23rd March 2016). Notification to DotE occurred on the 30th of March 2016 within 5 days of publishing the BEMP on Seqwater's website. In accordance to condition 1 of the EPBC approval the BEMP is now available on Seqwater's website at <http://www.seqwater.com.au/about/publications>

Status – Compliant

2.2 EPBC Condition 2

The BBWTP has not been operational since April 2014 and has subsequently triggered the cold standby shutdown (shutdown >12months) monitoring and sampling regime as outlined within the BEMP. Therefore no extraction from the borefield has occurred between the period of September 2016 and August 2017.

Status – Compliant

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2.3 EPBC Condition 3

This Annual compliance report fulfills the requirement of EPBC condition 3 addressing implementation of the BEMP within 3 months of the anniversary date. For the purposes of this report the anniversary date is the 1st of September with the Annual Compliance report due the 1st of December.

Status – Compliant

2.4 EPBC Condition 4

No activities otherwise than those in accordance to the BEMP were undertaken between the period of September 2016 and August 2017.

Status – Compliant.

2.6 EPBC Condition 5

No requests for revision of the BEMP by the Minister were received between the period of September 2016 and August 2017.

Status – Compliant.

2.7 EPBC Condition 6

No requests for an independent audit by the Minister were received between the period of September 2016 and August 2017.

Status – Compliant.

3. Implementation of the BEMP

3.1 Annual Monitoring Report

The Banksia Beach Water Treatment Plant has not been operational since April 2014 and has subsequently triggered the cold standby shutdown (shutdown >12months) monitoring and sampling regime as outlined within the BEMP. Therefore an annual vegetation monitoring report on the groundwater dependant ecosystems (GDE's) was prepared covering the period from September 2016 to August 2017.

As the cold standby shutdown (shutdown >12months) has been triggered, it is expected that the ongoing vegetation monitoring events will establish baseline vegetation condition and determine the natural range of variation that occurs in terms of structure, composition and condition. In order to increase the statistical power of the assessment, two additional monitoring transects at the site 6 (impact site) and site 5 (control site) were installed. Overall the surveys to date reveal that there is a broader similarity in structural and floristic attributes between the impact and control sites.

Whilst there was a reduction in floristic species diversity at both sites when comparing to previous survey's it is likely that long term monitoring will enable further understanding of the vegetation dynamics and ecological trends.

The full monitoring report can be found in Appendix B.

3.2 Community Reference Group (CRG)

The BEMP was amended in February/March 2016 to include changes when the BBWTP is in cold standby shutdown (shutdown >12months) which resulted in the CRG only being required to meet if specific issues arise during cold standby shutdown.

No CRG meetings were held during the reporting period 2016-2017.

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4. Conclusion

The BBWTP has not been operational since April 2014 and has subsequently triggered the cold standby shutdown (shutdown >12months) monitoring and sampling regime as outlined within the BEMP. Therefore no extraction from the borefield has occurred between the period of September 2016 and August 2017. No instances occurred during this reporting period that had the potential to significantly impact EPBC Act listed species or matters of national significance.

Annual compliance reports will continue to be published on Seqwater's website in accordance to condition 1 of the EPBC approval. The required monitoring outlined within the BEMP will be collected by Seqwater and presented within the next annual compliance report to demonstrate continued compliance with the EPBC Act conditions of approval.

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5. Appendix A – EPBC Approval Conditions (2007/3396)

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Australian Government
Department of the Environment

EPBC: 2007/3396

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Mr Daniel Spiller
General Manager – Asset Portfolio Development and Delivery
Seqwater
PO Box 16146
City East QLD 4002

Dear Mr Spiller

**Banksia Beach Water Treatment Plant and Borefield (EPBC 2007/3396)
Variation to Conditions of Approval**

I write in relation to the proposed variation to the conditions of approval for *Environment Protection and Biodiversity Conservation Act 1999* (EPBC) approval 2007/3396.

Officers of the department have considered your request, and have found that it is in accordance with the requirements of section 143(1)(c) of the EPBC Act; being that the proposed variation is necessary or convenient for the protection of a matter of national environmental significance.

As delegate of the Minister for the Environment, I have decided to approve the variation to the conditions of the approval in accordance with the provisions of the EPBC Act. The action must now be undertaken in accordance with the varied conditions specified in the enclosed variation notification.

I note that the variation of conditions requires that a Borefield Environmental Management Plan (BEMP) is submitted for approval. I am advised that a BEMP was submitted to the Department in January 2015 and that this plan will require some minor amendments to meet the requirements of the varied approval conditions.

The variation of conditions of approval does not relieve the person to whom it has been granted from an obligation to comply with any other law of the Commonwealth, State or Territory that is applicable to do the action and to have any right, title or interest that is required to access land or waters and to do the action.

If you have any enquiries in relation to this matter, please contact Penny Godwin on 02 6275 9516.



Shane Gaddes
Assistant Secretary
Compliance & Enforcement Branch
Environment Assessment and Compliance Division

10 April 2015

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Australian Government
Department of the Environment

CORRECTION NOTIFICATION

VARIATION TO CONDITIONS ATTACHED TO APPROVAL

Banksia Beach Water Treatment Plant and Borefield, Bribie Island
(EPBC 2007/3396)

The variation to conditions attached to approval signed on 10/4/2015 contained an error.

The notice incorrectly stated "insert conditions 1-7".
The notice should read "insert conditions 1-6".

Person making correction

Name and position Shane Gaddes
Assistant Secretary
Compliance and Enforcement Branch

signature

S. Gaddes

date of correction

17 April 2015

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Conditions attached to the approval

1. The **approval holder** must submit for approval by the **Minister** a **BEMP** designed to protect the ecological character of the Moreton Bay Ramsar wetlands. Once approved, the **BEMP** must be implemented. The approved **BEMP** must be published on the **approval holder's** website, with a location and/or metadata that enables easy discovery by relevant web searches, within one month of approval by the **Minister**. The **approval holder** must notify the **Department** within five **business days** of publishing the BEMP on its website. The BEMP must remain on the website for the period the approval has effect.
2. In accordance with the yield identified in the **BEMP**, the **approval holder** must limit groundwater extraction from the **Northern Borefield** to no greater than an annual average of 4.32ML/day, at a maximum daily rate of 5ML/day and totalling no more than 1580ML/year, subject to the requirements of conditions 1, 4 and 5.
3. The **approval holder** must maintain accurate records of all measures taken to implement the **BEMP** according to the conditions of this approval, and must make these records available to the **Department** on request. Within 3 months of every anniversary of the commencement of the action, the **approval holder** must publish a Compliance Report on its website addressing implementation of the **BEMP**. The **approval holder** must also notify any non-compliance with this approval to the **Department** in writing within 10 business days of becoming aware of the non-compliance. The **approval holder** must continue to annually publish the Compliance Report until such time as agreed in writing by the **Minister**. Such records may be subject to audit by the **Department** or be used to verify compliance with the conditions of the approval.
4. If the **approval holder** wishes to carry out any activity otherwise than in accordance with the **BEMP**, the person taking the action must submit to the **Department** for the **Minister's** written approval a revised version of the BEMP. The varied activity shall not commence until the **Minister** has approved the revised plan in writing. If the **Minister** approves the revised plan, that plan must be implemented in place of the plan originally approved. All revised plans approved by the **Minister** must be published on the **approval holder's** website within one month of their approval by the **Minister**.
5. If the **Minister** believes that it is necessary or convenient for the better protection of the relevant matters of environmental significance to do so, the **Minister** may request the **approval holder** to make specific revisions to the **BEMP** and submit the revised plan for the **Minister's** written approval. Once approved, the revised plan must be implemented. Unless the **Minister** has approved the revised plan, the **approval holder** must continue to implement the originally approved **BEMP**, as specified in the conditions.
6. Upon the direction of the **Minister**, the **approval holder** must ensure that an independent audit of compliance with the conditions of approval is conducted and a report submitted to the **Minister**. The independent auditor and audit criteria must be approved by the **Minister** prior to the commencement of the audit. The audit report must address the criteria to the satisfaction of the **Minister**.

Definitions

Approval Holder – means the person to whom the approval is granted

BEMP – means the Borefield Environmental Management Plan, as required under condition 2 and as amended in accordance with condition 4 or condition 5. The BEMP must include detailed management arrangements for ongoing ecological and groundwater monitoring, and reporting to the Department.

Department – means the Australian Government Department responsible for administration of the *Environment Protection and Biodiversity Conservation Act 1999*.

Minister – means the Minister responsible for administration of the *Environment Protection Biodiversity Conservation Act 1999*.

Northern Borefield – means the area identified as the northern borefield in the BEMP.

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6. Appendix B – Vegetation Surveys of the Groundwater Dependent Ecosystems (GDE)

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