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Prepared for **Department of Environment**

Final Report

Environmental Compliance Report

Author:

A handwritten signature in blue ink, appearing to read "Travis van den Berg", is written above a horizontal line.

Travis van den Berg
Environmental Advisor

Approved:

A handwritten signature in blue ink, appearing to read "Gordon Delaney", is written above a horizontal line.

Gordon Delaney
Manager Environment & Water Planning

Date: May 2016

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Executive Summary

The Glebe Beneficial Use scheme commenced discharge into the Glebe Weir on 7 February 2015. To date the receiving environment monitoring program has not detected any adverse environmental impacts to the receiving environment as a result of the discharge of treated CSG water into Glebe Weir.

SunWater has assessed the compliance status of the Glebe Beneficial Use Scheme against conditions 1 to 13 of the Department of Sustainability, Environment, Water, Population and Communities approval action; To construct and operate a pipeline for the transportation and use of up to 113 ML/day of treated coal seam gas water from Woleebee Creek to Glebe Weir in Queensland [See EPBC Act referral 2011/6181].

SunWater has assessed the Glebe Beneficial Use Scheme to have complied with conditions 1 to 13 of the approval.

1. Approval Conditions Compliance

1.1 Condition 1

The person taking the action must undertake the action in accordance with the Preliminary Documentation dated 2 August 2012, and the conditions of this approval. The conditions of this approval prevail to the extent of any inconsistencies.

1.1.1 Condition 1 compliance

All actions undertaken by SunWater in the construction of the Woleebee Creek to Glebe Weir pipeline and operation of the Glebe Beneficial Use Scheme have been in accordance with the conditions of the approval. This is demonstrated by there being no recorded reportable incidents for the Glebe Beneficial Use Scheme against the approval.

1.2 Condition 2

Within 20 business days after the commencement of the action, the person taking the action must advise the department in writing of the actual date of commencement of the action.

1.2.1 Condition 2 compliance

SunWater commenced action on 3 May 2013. Written advice of this was provided to the department on 17 May 2013 within the stipulated timeframe of 20 business days.

1.3 Condition 3

The person taking the action must prepare a Construction Environmental Management Plan (CEMP). The CEMP must be submitted to, and approved by the department prior to the commencement of the action. The CEMP must include, but should not be limited to, the following:

- a. measures to minimise impacts to EPBC Act listed threatened fauna species including measures to care for fauna;
- b. measures to minimise impacts to EPBC Act listed threatened flora, including a vegetation clearing strategy;
- c. measures to limit the spread of pests and invasive species;
- d. sediment and erosion controls;
- e. measures to revegetate and rehabilitate the subject site following construction; and
- f. measures to implement, monitor, or improve (should deficiencies be identified, either by the person taking the action or by the department) the CEMP.

1.3.1 Condition 3 compliance

On 15 April 2013 SunWater received confirmation (Appendix A) from the Department of Sustainability, Environment, Water, Population and Communities that the submitted CEMP had been assessed and approved by the department.

1.4 Condition 4

The person taking the action must not destroy by clearing or any other activity, more than 2.08 ha of the endangered ecological community “Brigalow (Acacia harpophylla) dominant and co-dominant,” nor more than 1.38 ha of the endangered ecological community “Coolibah – Black Box Woodlands of the Darling Riverine Plains and the Brigalow Belt South Bioregions.”

- a. If clearing of more than 2.08 ha of the endangered ecological community “Brigalow (Acacia harpophylla) dominant and co-dominant,” or more than 1.38 ha of the endangered

ecological community “Coolibah – Black Box Woodlands of the Darling Riverine Plains and the Brigalow Belt South Bioregions” is necessary, the person taking the action must:

- i. Undertake pre-clearance surveys of additional areas to be cleared; and
 - ii. Submit the pre-clearance surveys to the department for approval, prior to clearing.
- b. Any approved clearing of vegetation must be conducted in accordance with the CEMP, required by Condition 3.

1.4.1 Condition 4 Compliance

Whilst undertaking the action 1.25 ha of Brigalow (*Acacia harpophylla*) dominant and co-dominant, and 0.85 ha of Coolibah – Black Box Woodlands of the Darling Riverine Plains and the Brigalow Belt South Bioregions was cleared within the specified limits stated in condition 4. Evidence of this was provided to and acknowledged by the department on 7 March 2014.

Whilst under construction, weekly, and monthly reports (Appendix B), reported on any environmental issues or incidents encountered during construction within the applicable reporting period. This enabled any issues to be effectively communicated and addressed, and ensured all clearing undertaken, was in accordance with the approved CEMP.

1.5 Condition 5

The person taking the action must not destroy by clearing or any other activity, more than 22 ha of natural habitat suitable for the vulnerable species: Large-eared Pied-bat (*Chalinolobous dwyeri*); Southern-eastern Long-eared Bat (*Nyctophilus corbeni*); and Brigalow Scaly-foot (*Parademi orientalis*).

- a. If more than 22 ha of natural habitat suitable for the vulnerable species: Large-eared Pied-bat (*Chalinolobous dwyeri*); Southern-eastern Long-eared Bat (*Nyctophilus corbeni*); and Brigalow Scaly-foot (*Parademi orientalis*) is necessary, the person taking the action must:
 - i. Undertake pre-clearance surveys of additional areas to be cleared and
 - ii. Submit the pre-clearance surveys to the department for approval, prior to clearing.
- b. Any approved clearing of vegetation must be conducted in accordance with the CEMP, required by Condition 3.

1.5.1 Condition 5 Compliance

As detailed in SunWater’s Woleebee Creek to Glebe Weir Pipeline Vegetation Offset Strategy, and the Atkinson Realignment Flora Investigation report, the total area of natural habitat suitable for the vulnerable species: Large-eared Pied-bat (*Chalinolobous dwyeri*); Southern-eastern Long-eared Bat (*Nyctophilus corbeni*); and Brigalow Scaly-foot (*Parademi orientalis*) cleared was less than 22 ha.

During the construction of the Woleebee Creek to Glebe Weir pipeline there were no recorded non compliances with the CEMP.

1.6 Condition 6

The person undertaking the action must develop a Biodiversity Offset Strategy (BOS) to ensure better protection of the EPBC Act listed threatened species and communities. The BOS must be submitted to, and approved by the Minister prior to commencement of the action.

- a. The BOS must be developed in accordance with the EPBC Act Environmental Offset Policy.
- b. The BOS must include, but should not be limited to, the following:

- i. Details of the acquisition and ongoing management of vegetation which meets or will meet the definition of the endangered ecological community “Brigalow (Acacia harpophylla) dominant and co-dominant”;
- ii. Details of the acquisition and ongoing management of vegetation which meets or will meet the definition of the endangered ecological community “Coolibah – Black Box Woodlands of the Darling Riverine Plains and the Brigalow Belt South Bioregions”;
- iii. Details of steps to be undertaken to legally secure the proposed offset areas and implemented to BOS within 12 months of the commencement of the action.
- iv. The offset areas for each separate community must be contiguous (that is, the total cannot be composed of a number of fragments), and must not be located within an existing mining lease or mining lease application areas; and
- v. Upon legally securing the offset area, the BOS must be updated with a textual description and map to clearly define the location and boundaries of the offset area. This must be accompanied with the offset attributes and a shape file.

1.6.1 Condition 6 Compliance

SunWater submitted a BOS to the department on 1 May 2013. A signed letter of approval (Appendix C) was provided to SunWater on 2 May 2013 one day prior to the commencement of the action.

1.7 Condition 7

The person taking the action must prepare a Discharge Management Plan (DMP). The DMP must be submitted to, and approved by the Department prior to the commencement of discharge. The DMP must include measures to monitor the location, volume and type of a volume of water equivalent to the volume of discharged Coal Seam Gas Water.

1.7.1 Condition 7 Compliance

SunWater submitted the Discharge Management Plan to the Department on 22 January 2015. SunWater received a letter of approval for the discharge management plan from the department (Appendix D) on 23 January 2015.

1.8 Condition 8

The person taking the action must prepare and submit a Water Quality Monitoring Plan (WQMP), for the Minister’s approval.

- a. The WQMP must include, but not be limited to;
 - i. Measures to conduct regular environmental monitoring within the Dawson River, at a range of locations including but not limited to:
 1. Upstream of the discharge point;
 2. Within the Glebe weir, but downstream of the discharge point; and
 3. Downstream of Glebe Weir, at least as far as Theodore Weir.
 - ii. Details of parameters to be monitored.
 - iii. For each parameter specified in Condition 8(a)(ii), the WQMP must stipulate a threshold limit.
 - iv. The WQMP must specify the guideline, standard, or relevant research for which both the background level within the Glebe Weir and the threshold limit has been set, along with a discussion as to why the particular guideline, standard, or relevant research is appropriate.

- b. Within three months of every six month anniversary of commencement of discharge (and until two year after the cessation of discharge), the person taking the action must submit to the Minister an Environmental Performance Report (EPR). Each EPR must include, but not be limited to, the following:
 - i. The results of implementation of the DMP required by Condition 7;
 - ii. The results of the regular environmental monitoring required by the WQMP;
 - iii. An independent evaluation of the results of the regular environmental monitoring required by the WQMP, and an assessment of any new or increased impacts/likely impacts to the environment are identified.
- c. If, upon review of an EPR, the Minister is not satisfied that appropriate actions have been taken or will be taken to mitigate any new or increased impacts/likely impacts to the environment identified during the regular monitoring required by this condition, the Minister may direct the person taking the action to reduce or cease discharge. The person taking the action must then undertake an evaluation in accordance with the recommendations of an independent evaluator and submit the report to the department for approval.

1.8.1 Condition 8 Compliance

On 5 February 2015 a WQMP was submitted by SunWater to the department for the Minister's approval. The discharge commenced on 7 February 2015. SunWater submitted an EPR on 6 November 2015 within the timeframe specified. The next EPR is due to be submitted to the department by 7 May 2016. Each EPR also contains the available detailed results from the implementation of the DMP and WQMP. These have shown there has been no adverse environmental impact on the receiving environment as a result of the commencement of discharge.

1.9 Condition 9

The person taking the action must maintain accurate records substantiating all activities associated with or relevant to the conditions of approval, including measures taken to implement the management plans required by this approval, and make them available upon request to the department. Such records may be subject to audit by the department or an independent auditor in accordance with section 458 of the EPBC Act, or used to verify compliance with the conditions of the approval. Summaries or audits will be posted on the department's website. The results of audits may also be publicised through the general media.

1.9.1 Condition 9 Compliance

SunWater records are managed in accordance with SunWater's internal records management policy. The statements and intent of this policy is in accordance with the requirements of condition 9, ensuring all required records substantiating all activities associates with or relevant to the conditions of approval, including measures taken to implement the management plans required by the approval will be able readily available to the department if requested.

1.10 Condition 10

Within three months of every 12 months anniversary of the commencement of the action, the person taking the action must publish a Compliance Report on their website addressing the compliance with each of the conditions of this approval, including implementation of any management plans specified in the conditions. Documentary evidence providing proof of the date of publication and non-compliance with any of the conditions of this approval must be provided to the department at the same time as the compliance report.

- a. From first submission of the EPR described in Condition 8, the second of those reports submitted each year can also serve as the Compliance Report required by this condition, as long as the requirements of both conditions are met.

1.10.1 Condition 10 Compliance

This Compliance Report shall be available on SunWater's public website www.SunWater.com.au. Documentary evidence of compliance with these conditions has been provided to the Department throughout construction and operation including; photos, maps, and surveys.

1.11 Condition 11

If the person taking the action wishes to carry out any activity otherwise than in accordance with the management plans/strategy as specified in the conditions, the person taking the action must submit to the department for the Minister's written approval, a revised version of that management plan/strategy. The varied activity shall not commence until the Minister has approved the varied management plan/strategy in writing. The Minister will not approve a varied management plan/strategy unless the revised management plan/strategy would result in an equivalent or improved environmental outcome over time. If the Minister approved the revised management plan/strategy that management plan/strategy must be implemented in place of the management plan originally approved.

1.11.1 Condition 11 Compliance

During the construction of the Woleebee Creek to Glebe Weir Pipeline the pipelines final alignment involved a slight variation from the original alignment communicated to the department. This alignment change and evidence that the impacts were able to be managed through the existing plans and strategies was provided to the department. The department acknowledged receipt of this information on 7 March 2014.

1.12 Condition 12

If the Minister believes that it is necessary or convenient for the better protection of World Heritage properties (sections 12 and 15A), National Heritage places (sections 15B and 15C), Listed Threatened Species and Communities (sections 18 and 18A), or the Great Barrier Reef Marine Park (section 24B and 24C) to do so, the Minister may request that the person taking the action make specified revisions to the management plan/s/strategy for the Minister's written approval. The person taking the action must comply with any such request. The revised approval management plan/strategy must be implemented. Unless the Minister has approved the revised management plan/strategy, then the person taking the action must continue to implement the management plan/strategy originally approved, as specified in the conditions.

1.12.1 Condition 12 Compliance

SunWater has not received any requests from the Minister to make specified revisions to the management plan/s/strategy for the Minister's written approval.

1.13 Condition 13

Unless otherwise agreed to in writing by the Minister, the person taking the action must publish all management plans referred to in these conditions of approval on their website. Each management plan must be published on the website within one month of being approved.

1.13.1 Condition 13 Compliance

SunWater has published the Construction Environmental Management Plan, Discharge Management Plan, and Water Quality Management Plan on the SunWater website: www.SunWater.com.au.

APPENDIX A:
Construction Environmental Management Plan Approval



Australian Government

Department of Sustainability, Environment, Water, Population and Communities

Ref: 2013/02247

Mr Sean Fleming
Senior Project Manager
SunWater Limited
PO Box 15536 City East
BRISBANE QUEENSLAND 4002

Dear Mr Fleming

Woleebee Creek to Glebe Weir Pipeline Project (EPBC 2011/6181): Approval of the Woleebee Creek to Glebe Weir Pipeline Project Construction Environmental Management Plan

Thank you for submitting the *Woleebee Creek to Glebe Weir Pipeline Project Construction Environmental Management Plan Document number 13843_Env_Pln_001 Revision 5* to the department for approval on 27 March 2013.

The above plan has been reviewed by officers of the department and has been found to meet the requirements of condition 3 of EPBC Approval 2011/6181. On this basis, and as delegate of the Minister, I have decided to approve the above plan.

In accordance with EPBC Approval 2011/6181 condition 3, the approved plan must be implemented. Under condition 11, if SunWater Limited wants to act other than in accordance with the approved plan, SunWater Limited must submit a revised plan for approval. Until the Minister (or his delegate) has approved a revised plan, SunWater Limited must continue to implement the original plan.

Should you require further information on this matter, please contact Mr Dieter Kluger, A/g Director, Approvals Monitoring - Coal Seam Gas Section, on 02 6275 9453 or by email to: dieter.kluger@environment.gov.au.

Yours sincerely

Shane Gaddes
A/g Assistant Secretary
Compliance and Enforcement Branch
15 April 2013



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APPENDIX B:
Construction Report Examples

WOLEEBEE CREEK TO GLEBE WEIR PIPELINE PROJECT

Weekly Construction Report

Project Number:	P-ASWP-0033-AA-01-04
Project Name:	Woleebee Creek to Glebe Weir Pipeline
Date:	19 January 2014
Location/Area:	Wandoan/Taroom
Contractor:	Murphy Pipe and Civil Pty Ltd
Report Author:	John Kelly, Construction Manager
Period Ending:	Period Ending 18 January 2014

WEATHER

Previous Week

Fine and sunny. No rain.

Coming Week

Hot and Sunny. Chance of thunderstorm on Thursday (70% chance 10-20mm) and possible late showers Wednesday, Friday and Saturday (30-60% chance 1-10mm). Min 21-26°C and Max 38-43°C

28 Day Rainfall Forecast

Medium chance of rain (50-75%) on 23-24 January, High chance of rain 25 January and Low chance of rain 20, 29 January and 5, 16 February 2014.

SUMMARY

- The switchroom for the pump station was delivered to site on Wednesday 15 January and is now installed on the column footings. Cabling throughout has now commenced.
- The placement of compacted road base material across the compound continues to final design levels.
- The balance tank is complete with crews finalising the swab catching and launching structures upstream and downstream of the tank respectively. Some delays in the delivery of 1000mm Gate valves has delayed the completion of the swab structures. These valves are scheduled for delivery early in the new year. The installation of the security fence has commenced.
- All pipe is now installed through Moodys section (completed prior to Christmas break) and has been backfilled. Work continues on minor structures (standpipes, scours and air valves). It is anticipated the Moodys will reach mechanical completion through their section (43.6-73.6km) by mid February.
- Rehabilitation activities are continuing in both MPC and Moodys section.
- Construction of the control structure is practically complete with valve supports for the needle valves yet to be installed.
- Hydrostatic testing of the pipeline is progressing. The pipeline has been successfully tested between chainage 0-29km. Test section 6 from 29-40km was filled and testing commenced prior to the Christmas break however testing identified a leak (at a dismantling joint) and the section had to be drained. This is currently being repaired.

WORK COMPLETED AND COMMENTS – PIPELINE INSTALLATION

Clearing and Grubbing - **Complete**

- Clearing of the MPC section of the RoW is complete.
- Clearing of the Moody section of the RoW is complete.

Topsoil Stripping - **Complete**

- Topsoil stripping of the MPC section of the RoW is complete.
- Topsoil stripping of the Moody section of the RoW is complete.

Sand Deliveries - **Complete**

- Sand deliveries to stockpiles for the project are complete.

Pipe Stringing - **Complete**

- Pipe stringing in the MPC section is complete.
- Pipe stringing in the Moody section is complete.

Trenching and Pipe Installation - **Complete**

- Trenching in the MPC section is complete.

- Pipe lay in the MPC section is complete.
- Trenching in the Moody section is complete.
- Pipe lay in the Moody section is complete.

Backfilling - **Complete**

- Backfilling in the MPC section is complete.
- Backfilling in the Moody section is complete.

Topsoil Rehabilitation

- Rehabilitation in the MPC section is complete with topsoil replacement now finished. Final rehabilitation of the RoW continues between 74-88km. Installation and re-instatement of fencing, gates and grids is progressing.
- Rehabilitation and topsoil replacement in the Moody section continues to progress.
- Planting of native trees and shrub species at creek crossings is yet to occur throughout.

Fibre Optic Cable

- Installation of the fibre optic cable has commenced with approximately 98km of fibre now in the ground. This completes the MPC section of the pipeline and 10km of the Moody section.
- Fibre installation through Moody's section (52-73.6km) has commenced and has progressed to chainage 67km.

Hydrostatic Testing

- The pipeline has been successfully tested from 0-29km. A leaking dismantling joint and flange at 29km prevented the successful testing of section 6 (29-41km) prior to Christmas and the section had to be drained to repair the items.
- Test section 1 is now full and will be tested the week of 19 January. Test section 2 is currently being filled and will be tested the week commencing 26 January.
- At the completion of testing of sections 1 and 2, the pipeline will be filled from chainage 29km-103km (including the balance tank) and sections 3,4,5,6a and 6 will be tested in February 2014. It is anticipated that all hydrostatic testing will be complete by the end of February.

Test Section	Start CH	End CH	Length	Diameter	Date for Test
1	119.4	118.18	1,241	800+914	27 Jan 14
2	118.18	103.869	14,311	914	25 Jan 14
3	103.869	73.724	30,145	1067	24 Feb 14
4 incl. BT	73.724	73.602	51	1067	21 Feb 14
5	73.602	41.965	31,708	1067	9 Feb 14
6a	41.965	40.959	1,006	1067	11 Jan 14
6	40.959	29.506	11,453	1067	11 Dec 13
7	29.506	27.0	2,506	960	Complete

8	27.0	12.353	14,641	960	Complete
9	12.353	6	6,353	914	Complete
10	6	0	6,000	914	Complete
11	Pump Stn Discharge	0	115	Various	TBA
12	Pump Stn Suction	Pump Stn Discharge	140	Various	TBA

WORK COMPLETED AND COMMENTS – PIPELINE STRUCTURES

Flow meter Structure @ 0m (pump station)

- Installation of pipework is complete and the support slab underneath the flow meter is also complete. Flow meter itself is yet to be installed. The two additional pipe supports required to support the pipework are also complete.

Air Valves

- Installation of air valves continue throughout the entire pipeline.

Scour Outlets

- Scour outlets continue to be installed, mainly in the Moody section of works (approximately 50% complete). Scours in the MPC section of the pipeline are complete.

Customer Offtakes – Stock

- Installation of stock offtakes from associated air valves continues through the pipeline.

Customer Offtakes – Irrigation

- Construction of the slab for the irrigation offtakes at chainage 830m and 15,100m is complete.
- Electrical cabinets for the irrigation outlets control system have also been delivered to site and installed as have the solar panels and poles.
- The pipework at both locations is yet to be installed.

Xstrata Mine Offtake - **Complete**

- The Xstrata mine offtake is complete. However a minor leak through the flange on the riser was identified when testing section 6. This is currently being repaired.

Isolation Valve Structures

- The construction of the isolation valve structure at chainage 12.4km, 40.9km, 52.7km, 63.4km is complete.
- The construction of the isolation valve structures at chainage 41.9km, 52.7km, 63.4km, 82.8km and 93.8km continue to progress. Delays have been experienced with large diameter gate

valves being delivered to site. It is expected that these will be completed early in the coming weeks.

Swab Structures

- Construction of the swab launching structure at chainage 0.0km is practically complete. Final pipe supports are all that remain to complete this structure.
- Construction of the swab catching/launching structure at chainage 29.5km is practically complete. Final security fencing is all that remains to complete this structure.
- Construction of the swab/launching catching structures at the balance tank (chainage 73.3km) are progressing. All main pipework is in place and thrust blocks are complete as are concrete pipe supports. Minor pipework is also installed. Major gate valves are all that remain to be installed.
- Construction of the swab catching/launching structure at chainage 103.9km continues to progress. Filling pipework has been installed. Completion of the structure is dependent on final delivery of large gate valves.
- Construction of the swab catching structure at chainage 117.9km is complete.

Standpipes

- Standpipe branches are being installed with the main pipeline.
- Standpipes have been installed at chainage 0m, 1238m, 2555m, 9557m, 39461m, 51278m, 52501m and 63369m.
- Blank standpipe branches to be used for future standpipes have been installed with the main pipeline.

Surge Tanks

- Construction of the surge tank at chainage 4,946m is complete. All major pipework and valves are now in place including bypass pipework. The lining of the surge tank is complete.
 - The tank was filled as part of the pipeline filling process. The tank is leaking through the base. The tank supplier/sub contractor has been to site to inspect the situation. At the completion of hydrostatic testing the tank will be drained and repaired.
- Construction of the surge tank at chainage 52,953m has progressed with all major pipework in place. Bypass pipework has been installed and concrete works are complete. The installation of electrical equipment at this site has also commenced.

Control Valve Structure

- The control valve structure is practically complete. All security fencing is complete. Pipe supports for the needle valves remain to be installed.

Outlet Structure - **Complete**

- The grout filled erosion protection mattress at the outlet structure is complete. The concrete outlet structure is also complete. Steel work (covers and handrails) are also now complete.

WORK COMPLETED AND COMMENTS – PUMP STATION

Bulk Earthworks to Pad Level, Foundations, Detailed Excavation, Trim - **Complete**

- Bulk earthworks down to the foundation levels for the pump station footings and plinth are complete and all backfill concrete has been placed.
- Final trim of the finished surface levels has also commenced in preparation of the compacted road base material. The final layer of compacted road base has commenced in some areas

Foundation, Slabs, Plinths - **Complete**

- Concrete placement for the pump station column footings and plinths is complete. The foundation area was backfilled and compacted to the underside of the pump station floor slab.
- Construction of the pump station drainage system is progressing with the construction of the drainage sump complete. Construction of the drainage outlet structure is also complete.
- Construction of the pump station floor slab is complete.
- Construction of the slab for the control room is complete.
- Construction of the slab for the RMU is complete.
- Construction of the footings and slab for the shed over the Jacking pump and also the plinth for the Jacking pump are complete.

Pump Station Suction Pipework/Valves

- Construction of the suction manifold is complete.
- The suction valves have all been installed.
- The suction main has been constructed to a point 12m short of the connection with GELOR. At the request of QGC, SunWater ceased construction of the suction main to allow SunWater to tie into GELOR pipework once it's installed.
- Subsequent to this, QGC has requested SunWater to construct GELOR's section of the suction main. SunWater is currently finalising design and ordering additional pipework..

Pump Station Discharge Pipework/Valves

- Construction of the discharge manifold is complete. Pipework on the discharge side of the pumps is in place with spools installed in lieu of valves until the discharge valves arrive on site.

Pump Installation

- Major pipework and valve installation is yet to commence internal to the pump station.
- The first pump will be arriving from Torishima on 24 January with the remaining 5 pumps arriving on 11 February.

Pump Station Building

- The steelwork for the pump station building has been erected and acoustic wall panelling, insulation and cladding is complete. The sliding doors are also now installed. Final punchlists for the pump station building are currently being addressed.

Gantry Crane - Complete
<ul style="list-style-type: none"> The Gantry crane has been installed and is complete.
Pump Station Metalwork
<ul style="list-style-type: none"> Metalwork associated with the pump station (stairs, platforms, walkways etc.) has been installed internal to the pump station. External metalwork is yet to be installed.
Pump Station Control Room - Complete
<ul style="list-style-type: none"> The pump station control room was delivered to site on 15 January and has now been installed.
Pump Station Electrical Installation
<ul style="list-style-type: none"> JP Richardson have mobilised to site and have commenced electrical work at the pump station. HV cables are now in place from the pump plinths to control room as is most of the LV cabling. The high level electrical installation at the pump station is progressing and the low level electrical installation at the pump station is yet to commence. Electrical installation to the control room has also commenced.
Pump Station Access Roads, Fencing and Rehabilitation
<ul style="list-style-type: none"> Culverts for the access roads into the pump station compound from Gadsbys road have been installed. Culverts associated with the internal drainage of the pump station compound adjacent to Gadsbys road are also now complete. The concrete V-drain around the perimeter of the pump station compound is also complete. Rehabilitation of exposed batters has commenced. Fencing of the compound is yet to commence.

WORK COMPLETED AND COMMENTS – BALANCE TANK @ 73,673m
Bulk Earthworks to Pad Level, Foundation, Detailed Excavation, Trim - Complete
<ul style="list-style-type: none"> Excavation down to the foundation level for the balance tank is complete. The balance tank is founded on hard sandstone. The placement of lean mix over the foundation material is complete. The lean mix was much drier than expected upon delivery and placement and required additional watering and rolling post placement to achieve the required finish.
Underdrains - Complete
<ul style="list-style-type: none"> The inner and outer circumferential under drains and radial drains have all be dug and filled with aggregate. The compaction of the lean mix adjacent to the radial drains and around the perimeter of the tank was unacceptable and as such the drains around the perimeter of the tank were formed and all loose uncompacted lean mix material was removed and replaced with concrete. The construction of the scour/drainage pipework and inlet/outlet pipework and pits is also complete.

<ul style="list-style-type: none"> The no fines concrete layer is complete.
Reinforcing and Concrete Works - Complete
<ul style="list-style-type: none"> The construction of the 300mm thick floor slab is complete. The finish on the floor is exceptional. The construction of the ring beam is also complete. The construction of all walls is complete with patching on the Peri formwork holes also complete.
Hydrostatic Testing
<ul style="list-style-type: none"> Nil to Report. Yet to commence
Overflow Outlet Structure - Complete
The overflow drain concrete work is complete. Excavation and installation of pipes associated with the overflow drain is complete.
Fencing and Access Roads
<ul style="list-style-type: none"> Final earthworks for the access roads in and around the balance tank is complete. Perimeter fencing of the balance tank has also commenced. The construction of the lay down area for the spare pipes from the project has also commenced and is nearing completion.
Electrical Installation
<ul style="list-style-type: none"> Ergon power supply has been installed to the balance tank. The electrical cabinet has been delivered on site by JP Richardson.
Rehabilitation - Complete
<ul style="list-style-type: none"> Spoil from the construction of the balance tank has been formed and hydro-mulched.

WORK COMPLETED AND COMMENTS – PERMANENT ACCESS ROAD TO CONTROL VALVE STRUCTURE
Permanent Access Road to Control Valve Structure
<ul style="list-style-type: none"> Construction of the permanent access road is complete to just short of the swab structure at 118km. The final length of road to the control valve structure will be completed once the swab structure and the control valve structure are complete. Sheeting the existing access road from the Glebe Rd to the new section of access road is also complete.

QUALITY ASSURANCE

- SunWater inspectors continue to inspect reinforcement and concrete pours on site as well as pneumatic tests on welds etc. SunWater engineers also continue to assess reinforcement schedules, sand supply materials test reports and compaction results submitted by the contractor.
- The Contractor has provided work procedures, ITP's and checklists for all activities currently being undertaken. MPC is working well with SW Inspectors ensuring open lines of timely communication to ensure SW inspectors are present at numerous hold and witness points as required by the specifications.
- MPC Supervisors are responding well to issues and concerns raised by SunWater Inspectors in the field and are addressing concerns as they are raised.
- SunWater Inspectors are signing QA sheets as required by MPC's QA system however not all witness points are able to be witnessed by SunWater's Inspectors. In these cases SunWater Inspectors are noting that the activity was 'un-witnessed'.
- QA issues with concrete have been an issue in the last month and has required some direct action from the contractor and sub-contractor to ensure quality is maintained and the integrity of concrete structures is not compromised.

WORKPLACE HEALTH AND SAFETY

- Nil incidents to report this period.

ENVIRONMENTAL

- Rehabilitation of creeks and watercourses continues as the rehabilitation crew move through the RoW. All creek crossing restoration in the MPC section is complete.
- Jute matting is in place at numerous creek crossings. Hydro-mulching a selected grass seed mix has also commenced. Re-planting of trees and shrubs native to the area at watercourses is yet to commence.

CONTRACT MANAGEMENT AND VARIATIONS

11SW3921-2 – Murphy Pipe and Civil – Pipeline Construction

Woleebee to Glebe Pipeline Project



MONTHLY SUMMARY REPORT

MONTH ENDING: 31-Dec-13	CONTRACT NUMBER: 115W3921-2
PREPARED BY: B. Reynolds	DATE: 18/01/2014

SAFETY, ENVIRONMENT and CULTURAL HERITAGE

LTI's	MTI's	First Aid Injury	Near Miss Event	
0	0	0	2	1/12/13 - A stand alone semi water trailer was set up with the front legs on suitable ground sitting sitting with timbers underneath legs for suitable bearing. After a period of bad weather (rain), the ground underneath one of the legs became soft causing the front leg to sink into the ground which made the trailer unstable. The incident was rectified there and then with no injuries or damaged caused.
Damage	Not Work Related	Environmental	Other	
0	0	0	0	8/12/13 - While cutting re-bar with a quick cut a spark flew over the berm and ignited a small grass fire. The fire was immediately put out and the area was monitored for potential flare ups.

SUBCONTRACTORS, HUMAN RESOURCES and INDUSTRIAL RELATIONS

Persons on Board	Moody Civil and Pipe has approx 70 men on site. Other subcontractors account for approx 16. MPC direct staff approx 119. Nil concerns re: IR/HR.
205	Major subcontractors on site during September: Moody Civil and Pipe, Boral (mobile batch plant), Monfords (balance tank), Ford Brothers Fencing, Realtime Survey Solutions, AusFab (pump station), J&P Richardson (pump station) There have been no industrial disputes or complaints from employees or subcontractors.

QUALITY

Audits	NCRs Raised in Dec	NCRs Closed in Dec	NCRs Outstanding	
0	3	5	3	Boral: On 10 September, potentially defective concrete was placed in the wall of the balance tank (lower lift, east side, 7m3 total). Boral supplied concrete which slumped on site to 140mm. The load was rejected and sent back to be dumped. Boral kept the concrete in the agitator and sent it back to the balance tank 90 minutes, accompanied by a new docket. Subsequent investigation by MPC revealed further failures in Boral's QA system. These failures have been remedied: see NCR015 for further details. MPC have conducted non-destructive testing of the wall segment. MPC are awaiting interpretation and analysis of the results which will then be provided to SunWater. SunWater will then direct MPC what, if any, remedial work is required. The liability for any remedial work will be borne by Boral. <i>These results are currently under review by an independent Engineer, results were to be received prior to Christmas however Engineer was delayed. Results now to be received by 21/01/14.</i>

PROGRESS

Activity	Quantity	Unit	Total this month	Total last month	Cumulative total	Planned % complete	Actual % complete	Variance	Comment
Clear & Grade	119,350	m	1,234	4,893	119,350	100.00%	100.00%	0.00%	All works completed
String sand	327,250	ton	0	0	328,526	100.00%	100.39%	0.39%	Complete.
String Pipe	119,350	m	1,517	8,085	119,350	100.00%	100.00%	0.00%	All works completed
Trench Excavation	119,350	m	2,409	7,835	119,350	100.00%	100.00%	0.00%	All works completed
Pipelay	119,350	m	3,841	8,671	119,350	100.00%	100.00%	0.00%	All works completed
Backfill	119,350	m	4,547	8,644	119,350	100.00%	100.00%	0.00%	All works completed
Rehabilitation	119,350	m	1,650	0	90,200	93.30%	75.58%	-17.72%	Completing final trim of ROW. Tidying up around structures and compaction and completion of access track. Moody has only started all rehab works, Moody is currently working on the first pass. All rehab including Moodys to be completed in February.
Isolation and Swab structures	14	no	1.0	1.5	11.5	85.00%	82.14%	-2.86%	Moody has started both isolation structures in his section. All structures in MPCs section are complete as far as practical, we are now awaiting delivery of valves.
Scour outlets	53	no	3.0	3.0	46.0	86.00%	86.79%	0.79%	All scours complete in MPCs section. Moody continues scours in his section.
Offtakes and standpipes	40	no	4.0	3.0	35.0	85.00%	87.50%	2.50%	All standpipes complete in MPCs section, Moody is continues offtake works in his section.
Pump Station Civil Works	100.00%	%	100.00%	1.00%	100.00%	100.00%	100.00%	0.00%	All works completed
Pump Station Mechanical Works (incl building)	100.00%	%	2.00%	3.00%	70.00%	70.00%	70.00%	0.00%	Shed completed. Mechanical fit out has started with first main pump to arrive 24th Jan.
Balance Tank	100.00%	%	0.00%	1.00%	100.00%	100.00%	100.00%	0.00%	See Quality section above. All other works complete.
Outlet Structure	100.00%	%	0.00%	0.00%	100.00%	100.00%	100.00%	0.00%	Works complete.
Cathodic Protection	100.00%	%	3.00%	15.00%	93.00%	100.00%	93.00%	-7.00%	DCVG in Moodys section and 2 test points remain. To be completed by early February.
Fibre Optic	100.00%	%	0.00%	0.00%	80.87%	100.00%	80.87%	-19.13%	Ploughing delayed due to Moodys mainlay being behind schedule. Splicing continues, remainder of cable to be ploughed in January (3 days work).
Electrical (pipeline and pump station)	100.00%	%	5.00%	38.00%	60.00%	58.00%	60.00%	2.00%	Works continue on electrical. Pump Station main works apart from permanent hook up will be completed by start Feb. All works including pumps hook up will be completed by mid March.

Comments / Issues

1	Moodys has now completed all main lay works and has started works on all structures. Progress is being monitored but currently there should be no issues meeting the MC date of the 14th February 2014 provided wet weather is not encountered.
2	There were two leaks located during testing of section 6, investigation is currently taking place.
3	Commissioning plan comments received back from SW, final submission to be made by mid February.

General Look Ahead for January

1	Updated hydrotest program shows all testing apart from the pump station to be completed by the end of February.
2	Pre-commissioning sign off to continue of completed structures.
3	Moody Civil and Pipe continue activities. MC to be reached by the 14th February.
4	All remaining rehab works on the mainline, pumpstation and balance tank to be completed by end February.
5	Remaining fibre optic to be ploughed in and all splicing completed. Testing to be completed early January.
6	All remaining mechanical field structures to be completed by the end Jan. There will be one 1000mm valve left to be completed early February.
7	First pumpset to arrive onsite 24th January, remaining pumpsets to be delivered 10th February.

APPENDIX C:
Biodiversity Offset Strategy Approval



Australian Government

Department of Sustainability, Environment, Water, Population and Communities

Ref: 2013/02244

Stuart Low
Senior Project Manager Project Development
SunWater Limited
PO Box 15536
CITY EAST QLD 4002

Dear Mr Low

**SunWater Limited Woleebee Creek to Glebe Weir Pipeline Project, Queensland
(EPBC 2011/6181): Approval of the Biodiversity Offset Strategy**

Thank you for submitting *the Woleebee Creek to Glebe Weir Pipeline Project Biodiversity Offset Strategy, version 11*, dated 1 May 2013, to the department for approval on 1 May 2013.

The above plan has been reviewed by officers of the department and has been found to meet the requirements of condition 6 of EPBC Approval 2011/6181. On this basis, and as delegate of the Minister, I have decided to approve the above plan.

In accordance with EPBC Approval 2011/6181 condition 11, the approved strategy must be implemented. Under condition 11, if SunWater wants to act other than in accordance with the approved strategy, SunWater must submit a revised strategy for approval. Until the Minister (or his delegate) has approved a revised strategy, SunWater must continue to implement the original strategy.

Should you require further information on this matter, please contact Mr Dieter Kluger, A/g Director, Approvals Monitoring - Coal Seam Gas Section, on 02 6275 9453 or by email to: dieter.kluger@environment.gov.au.

Yours sincerely

Shane Gaddes
A/g Assistant Secretary
Compliance and Enforcement Branch
2 May 2013

APPENDIX D:
Discharge Management Plan Approval



Australian Government
Department of the Environment

Tim Donaghy
General Manager Industrial Pipelines
SunWater Limited
PO Box 15536 City East
Brisbane Qld 4002

Dear Mr Donaghy

Woleebee Creek to Glebe Weir Pipeline project, Qld (EPBC 2011/6181)

Variation of condition 7 and the definition of 'Regular'

I refer to your letter of 27 October 2014 to the Department requesting a variation to condition 7 and the definition of 'Regular' in the Approval dated 27 September 2012 and subsequent email communication between officers of SunWater and the Department.

As delegate of the Minister for the Environment I have decided to approve your request, as confirmed in your emails of 5 January 2015 and 23 January 2015, in accordance with the provisions of the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act). Condition 7 and the definition of 'Regular' must now be complied with in accordance with the enclosed variation notification.

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.

Please ensure that SunWater Limited maintains accurate records of all activities associated with, or relevant to the conditions of approval, so that they can be made available to the Department on request. Such documents may be subject to audit and used to verify compliance. Summaries of results of audits may be published by the Department. Information about the monitoring and audit program can be found on the Department's website at www.environment.gov.au/epbc/compliance/auditing.html.

You should note that any transfer of this approval to another person must have the consent of the Minister for the Environment under section 145B of the EPBC Act.

Approval of the Discharge Management Plan

Thank you for submitting the *SunWater Discharge Management Plan for compliance with Department of Environment Approval, January 2015* to the Department for approval on 22 January 2015.

The above plan has been reviewed by officers of the Department and has been found to meet the requirements of condition 7 of EPBC Approval 2011/6181. On this basis, and as delegate of the Minister, I have decided to approve the above plan.

In accordance with EPBC Approval 2011/6181 condition 11, if SunWater wants to act other than in accordance with the approved plan, SunWater must submit a revised plan for approval. Until the Minister (or his delegate) has approved a revised plan, SunWater must continue to implement the original plan.

Should you require any further information please contact Mr Rod Whyte, Director, Post Approvals Section, on 02 6275 9934 or by email: rod.whyte@environment.gov.au.

Yours sincerely



Shane Gaddes
Assistant Secretary
Compliance and Enforcement Branch
23 January 2015

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