



Works Approval

Environmental Protection Act 1986, Part V

Works Approval Holder: Bechtel (Western Australia)
Pty Ltd

Works Approval Number: W5834/2015/1

Registered office: Level 6
140 St Georges Tce
PERTH WA 6000

ACN: 147 531 226

Premises address: Construction Village Expansion Camp Sewage Treatment Plant
Part of Lot 1577 on Plan 72843 within the following coordinates:
297115E, 7590630N; 297267E, 7590573N; 297209E, 7590419N;
297381E, 7590355N; 297375E, 7590339N; 297438E, 7590316N;
297501E, 7590485N; 297537E, 7590471N; 297544E, 7590492N;
297719E, 7590427N; 297848E, 7590409N; 297853E, 7590414N;
297887E, 7590506N; 297896E, 7590514N; 297920E, 7590505N;
297916E, 7590495N; 298063E, 7590440N; 297949E, 7590138N;
298086E, 7590086N; 298212E, 7590482N; 298297E, 7590454N;
298366E, 7590665N; 298023E, 7590779N; 297638E, 7590746N;
297629E, 7590749N; 297676E, 7590889N; 297249E, 7591032N;
TALANDJI WA 6710

Issue date: Thursday, 9 July 2015

Commencement date: Monday, 13 July 2015

Expiry date: Thursday, 12 July 2018

The following category/s from the *Environmental Protection Regulations 1987* cause this
Premises to be a prescribed premises for the purposes of the *Environmental Protection Act 1986*:

Category number	Category description	Category production or design capacity	Approved premises production or design capacity
54	Sewage facility: premises – (a) on which sewage is treated (excluding septic tanks); or (b) from which treated sewage is discharged onto land or into waters.	100 cubic metres or more per day	168m ³ per day

Conditions

This Works Approval is subject to the conditions set out in the attached pages.

.....
Officer delegated under section 20
of the *Environmental Protection Act 1986*



Works Approval Conditions

1 General

1.1 Interpretation

1.1.1 In the Works Approval, definitions from the *Environmental Protection Act 1986* apply unless the contrary intention appears.

1.1.2 In the Works Approval, unless the contrary intention appears:

'Act' means the *Environmental Protection Act 1986*;

'AS/NZS 5667.1' means the Australian Standard AS/NZS 5667.1 *Water Quality – Sampling – Guidance of the Design of sampling programs, sampling techniques and the preservation and handling of samples*;

'AS/NZS 5667.10' means the Australian Standard AS/NZS 5667.10 *Water Quality – Sampling – Guidance on sampling of waste waters*;

'annual period' means the inclusive period from 1 April until 31 March in the following year;

'averaging period' means the time over which a limit or target is measured or a monitoring result is obtained;

'CEO' means Chief Executive Officer of the Department of Environment Regulation;

'CEO' for the purpose of correspondence means;
Manager Licensing (Process Industries)
Department of Environment Regulation
Locked Bag 33
CLOISTERS SQUARE WA 6850
Telephone: (08) 9333 7510
Facsimile: (08) 9333 7550
Email: industry.regulation@der.wa.gov.au;

'code of practice for the storage and handling of dangerous goods' means document titled "Storage and handling of dangerous goods: Code of Practice" published by the Department of Mines and Petroleum, as amended from time to time;

'Commissioning' means the process of operation and testing that verifies the works and all relevant systems, plant, machinery and equipment have been installed and are performing in accordance with the design specification set out in the works approval application;

'dangerous goods' has the meaning defined in the *Dangerous Goods Safety (Storage and Handling of Non-explosives) Regulations 2007*;

'environmentally hazardous material' means material (either solid or liquid raw materials, materials in the process of manufacture, manufactured products, products used in the manufacturing process, by-products and waste) which if discharged into the environment from or within the premises may cause pollution or environmental harm. Note: Environmentally hazardous materials include dangerous goods where they are stored in quantities below placard quantities. The storage of dangerous goods above placard quantities is regulated by the Department of Mines and Petroleum;

'NATA' means the National Association of Testing Authorities, Australia;



'NATA accredited' means in relation to the analysis of a sample that the laboratory is NATA accredited for the specified analysis at the time of the analysis;

'Premises' means the area defined in the Premises Map in Schedule 1 and listed as the Premises address on page 1 of the Works Approval;

'Schedule 1' means Schedule 1 of this Works Approval unless otherwise stated;

'spot sample' means a discrete sample representative at the time and place at which the sample is taken;

'Works Approval' means this Works Approval numbered W5834/2015/1 and issued under the Act; and

'Works Approval Holder' means the person or organisation named as the Works Approval Holder on page 1 of the Works Approval.

1.1.3 Any reference to an Australian or other standard in the Works Approval means the relevant parts of the standard in force from time to time during the term of this Works Approval.

1.1.4 Any reference to a guideline or code of practice in the Works Approval means the current version of the guideline or code of practice in force from time to time, and shall include any amendments or replacements to that guidelines or code of practice made during the term of this Works Approval.

1.2 General conditions

1.2.1 The Works Approval Holder shall construct the works in accordance with the documentation detailed in Table 1.2.1:

Table 1.2.1: Construction Requirements ¹		
Document	Parts	Date of Document
Works Approval Application Form	All	17 March 2015
Wheatstone Project LNG Plant Application for a Works Approval for Construction Village Expansion Camp Sewage Treatment Plant (Reference 1105-356), Bechtel (Western Australia) Pty Ltd	All, including Drawings and Appendices	17 March 2015
Wheatstone Project LNG Plant – Response to DER Queries on Works Approval Application for Construction Village Expansion Camp Sewage Treatment Plant (Reference 1105-363), Bechtel (Western Australia) Pty Ltd	All, including Drawings and Appendices	27 March 2015
Wheatstone Project LNG Plant – Amendment to Works Approval Application for Construction Village Camp Expansion Sewage Treatment Plant (Reference 1105-370), Bechtel (Western Australia) Pty Ltd	All, including Drawings and Appendices	15 April 2015
Wheatstone Project LNG Plant – Response to DER Queries on Draft Works Approval for Construction Village Expansion Camp Sewage Treatment Plant (Reference 1105-400), Bechtel (Western Australia) Pty Ltd	All, including Drawings and Appendices	3 July 2015

Note 1: Where the details and commitments of the documents listed in condition 1.2.1 are inconsistent with any other condition of this works approval, the conditions of this works approval shall prevail.

1.2.2 The Works Approval Holder, except where storage is prescribed in section 1.3, shall ensure that environmentally hazardous materials are stored in accordance with the Code of Practice for the Storage and handling of dangerous goods.



- 1.2.3 The Works Approval Holder shall commission the Construction Village Expansion Camp Sewage Treatment plant for a period not exceeding 3 months.

1.3 Premises operation

There are no specified conditions relating to Premises operation in this section.

2 Emissions

There are no specified conditions relating to emissions in this section.

3 Monitoring

- 3.1.1 The Works Approval Holder shall ensure that:
- (a) all water samples are collected and preserved in accordance with AS/NZS 5667.1 unless indicated otherwise in relevant table;
 - (b) all wastewater sampling is conducted in accordance with AS/NZS 5667.10;
 - (c) all laboratory samples are submitted to and tested by a laboratory with current NATA accreditation for the parameters being measured unless indicated otherwise in relevant table.

- 3.1.2 The Works Approval Holder shall undertake the monitoring specified in Table 3.1.1 during the commissioning period.

Table 3.1.1: Monitoring of effluent quality					
Monitoring point reference	Parameter	Target	Units	Averaging period	Frequency
WQ1 – final effluent tank	pH ¹	6.5 – 8.5	pH units	Spot sample	Weekly
	<i>E.coli</i>	1	cfu/100ml		
	Total Nitrogen	30	mg/L		
	Total Phosphorous	10	mg/L		
	Biochemical Oxygen Demand	15	mg/L		
	Total Suspended Solids	20	mg/L		
	Effluent flow rate	-	m ³ /day	24 hours	Continuous

Note 1: In-field non-NATA accredited analysis permitted

4 Improvements

There are no specified conditions relating to improvements in this section.

5 Information

5.1 Reporting

- 5.1.1 The Works Approval Holder shall submit a compliance document to the CEO following the construction and commissioning of the works.
- 5.1.2 The compliance document shall:
- (a) certify that the works were constructed in accordance with the conditions of the Works Approval; and
 - (b) be signed by a person authorised to represent the Works Approval Holder and contain the printed name and position of that person within the company.



5.1.3 The Works Approval Holder shall submit a commissioning report for the Construction Village Expansion Camp Sewage Treatment Plant to the CEO within 1 month of the completion of commissioning.

5.1.4 The Works Approval Holder shall ensure the report includes;

- (a) a summary of the monitoring results recorded under condition 3.1.2;
- (b) a list of any original monitoring reports submitted to the Licensee from third parties for the commissioning period;
- (c) a summary of the environmental performance of the Construction Village Expansion Camp Sewage Treatment Plant as installed against the design specification set out in the works approval application;
- (d) a review of performance against the works approval conditions; and
- (e) where they have not been met, measures proposed to meet the design specification and/or works approval conditions, together with timescales for implementing the proposed measures.

5.2 Notification

5.2.1 The Works Approval Holder shall ensure that the parameters listed in Table 5.2.1 are notified to the CEO and are in accordance with the notification requirements of the table.

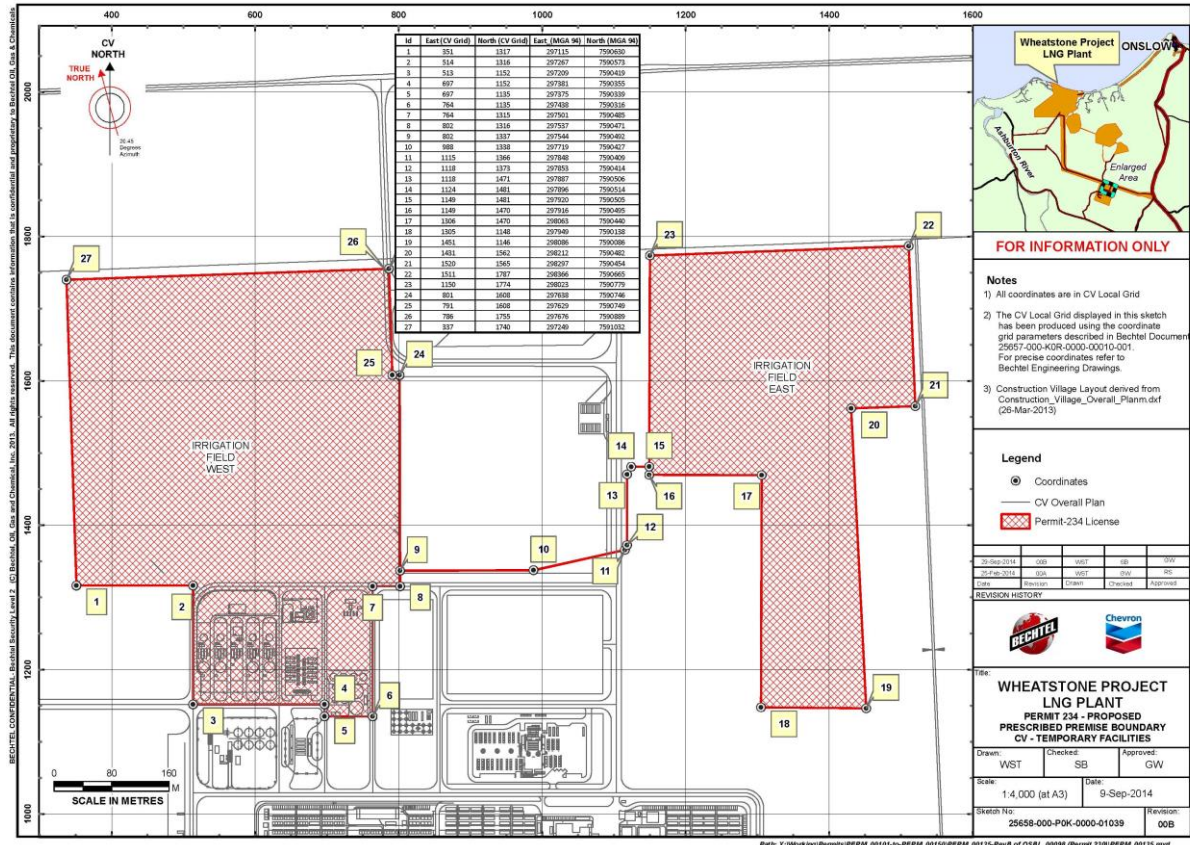
Table 5.2.1: Notification requirements			
Condition or table (if relevant)	Parameter	Notification requirement	Format or form
1.2.4	Commencement of commissioning	7 days prior to start	None specified
	Completion of commissioning	7 days after completion	



Schedule 1: Maps

Premises map

The Premises is shown in the map below. The red line depicts the Premises boundary.





Decision Document

Environmental Protection Act 1986, Part V

Proponent: Bechtel (Western Australia) Pty Ltd

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Decision

Based on the assessment detailed in this document the Department of Environment Regulation (DER) has decided to issue a works approval. DER considers that in reaching this decision, it has taken into account all relevant considerations and legal requirements and that the Works Approval and its conditions will ensure that an appropriate level of environmental protection is provided.

Decision Document prepared by:

Fiona Roser
Licensing Officer

Decision Document authorised by:

Jonathan Bailes
Manager Licensing



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1 Purpose of this Document

This decision document explains how DER has assessed and determined the application and provides a record of DER's decision-making process and how relevant factors have been taken into account. Stakeholders should note that this document is limited to DER's assessment and decision making under Part V of the *Environmental Protection Act 1986*. Other approvals may be required for the proposal, and it is the proponent's responsibility to ensure they have all relevant approvals for their Premises.

Works approval and licence conditions

DER has three types of conditions that may be imposed on works approvals and licences. They are as follows;

Standard conditions (SC)

DER has standard conditions that are imposed on all works approvals and licences regardless of the activities undertaken on the Premises and the information provided in the application. These are included as the following conditions on works approvals and licences:

Works approval conditions: 1.1.1-1.1.4, 1.2.1, 1.2.2, 5.1.1 and 5.1.2.

Licence conditions: 1.1.1-1.1.4, 1.2.1-1.2.4, 5.1.1-5.1.4 and 5.2.1.

For such conditions, justification within the Decision Document is not provided.

Optional standard conditions (OSC)

In the interests of regulatory consistency DER has a set of optional standard conditions that can be imposed on works approvals and licences. DER will include optional standard conditions as necessary, and are likely to constitute the majority of conditions in any licence. The inclusion of any optional standard conditions is justified in Section 4 of this document.

Non standard conditions (NSC)

Where the proposed activities require conditions outside the standard conditions suite DER will impose one or more non-standard conditions. These include both premises and sector specific conditions, and are likely to occur within few licences. Where used, justification for the application of these conditions will be included in Section 4.



2 Administrative summary

Administrative details		
Application type	Works Approval <input checked="" type="checkbox"/> New Licence <input type="checkbox"/> Licence amendment <input type="checkbox"/> Works Approval amendment <input type="checkbox"/>	
Activities that cause the premises to become prescribed premises	Category number(s)	Assessed design capacity
	54	168m ³ /day
Application verified	Date: 1 May 2015	
Application fee paid	Date: 14 May 2015	
Works Approval has been complied with	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/>	
Compliance Certificate received	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/>	
Commercial-in-confidence claim	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Commercial-in-confidence claim outcome	N/A.	
Is the proposal a Major Resource Project?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
Was the proposal referred to the Environmental Protection Authority (EPA) under Part IV of the <i>Environmental Protection Act 1986</i> ?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Referral decision No: Managed under Part V <input type="checkbox"/> Assessed under Part IV <input type="checkbox"/>
Is the proposal subject to Ministerial Conditions?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Part of Wheatstone LNG Project	Ministerial statement No: 873 EPA Report No: 1404
Does the proposal involve a discharge of waste into a designated area (as defined in section 57 of the <i>Environmental Protection Act 1986</i>)?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Department of Water consulted Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Is the Premises within an Environmental Protection Policy (EPP) Area Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		
Is the Premises subject to any EPP requirements? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		



3 Executive summary of proposal and assessment

Bechtel (Western Australia) Pty Ltd (Bechtel) is developing the Wheatstone Liquefied Natural Gas (LNG) Project near Onslow, Western Australia. The Ashburton North Village, located approximately 10km south-east of the LNG plant, contains infrastructure including accommodation, power and water supply to support construction of the Project.

Bechtel is proposing to expand the current accommodation facilities at the Ashburton North Village to house an additional 2000 personnel. The Construction Village (CV) Camp Expansion Sewage Treatment Plant (STP) will support this proposed expansion.

The CV Camp Expansion STP is a Membrane Bioreactor (MBR) type sewage system utilising a process of biological degradation and membrane separation to treat wastewater. The system has a maximum design capacity of 168 m³/day and will discharge treated wastewater to existing irrigation fields in accordance with Licence L8650/2012/1.



4 Decision table

All applications are assessed in line with the *Environmental Protection Act 1986*, the *Environmental Protection Regulations 1987* and DER's Operational Procedure on Assessing Emissions and Discharges from Prescribed Premises. Where other references have been used in making the decision they are detailed in the decision document.

DECISION TABLE				
Works Approval / Licence section	Condition number W = Works Approval L = Licence	OSC or NSC	Justification (including risk description & decision methodology where relevant)	Reference documents
General conditions	W1.2.3	OSC	Condition W1.2.3 is included on the works approval to allow commissioning of the STP for a 3 month period.	Application supporting documentation
Premises operation	L1.3.1 – L1.3.6	OSC	Condition L1.3.6 ensures that the irrigation area is managed to reduce runoff, erosion, ponding and weed growth. Refer to Appendix A for details of DER's assessment and decision making.	Application supporting documentation
Emissions general	L2.1.1	OSC	Descriptive limits are set through condition L2.6.1 and numerical limits and targets set through conditions L2.5.2 and L3.6.1 of the licence and therefore L2.1.1 regarding recording and investigation of exceedances of limits or targets is included on the licence.	N/A
Point source emissions to air including monitoring	W2 and W3 L2.2 and L3.2	N/A	There will be no point source emissions to air and as such no conditions relating point source emissions to air are required for the works approval. Licence conditions L2.2 and L3.2 for point source emissions to air including monitoring exist for diesel generator emissions.	Application supporting information
Point source emissions to surface water including monitoring	W2 and W3 L2.3 and L3.3	N/A	There will be no point source emissions to water and as such no conditions relating to point source emissions to water are required for the works approval or licence.	Application supporting information



DECISION TABLE				
Works Approval / Licence section	Condition number W = Works Approval L = Licence	OSC or NSC	Justification (including risk description & decision methodology where relevant)	Reference documents
Point source emissions to groundwater including monitoring	W3 L2.4 and L3.4	N/A	There will be no point source emissions to groundwater and as such no conditions relating to point source emissions to groundwater are required for the works approval or licence.	Application supporting information
Emissions to land including monitoring	W3.1.1 – W3.1.2 L2.5.1 – L2.5.2 L3.5.1	OSC	DER's assessment and decision making are detailed in Appendix A.	Water Quality Protection Note 22: Irrigation with nutrient-rich waste water (WQPN22) <i>Environmental Protection (Unauthorised Discharges) Regulations 2004</i>
Fugitive emissions	L2.6	N/A	Only minor dust emissions may be generated during construction. No dust emissions will occur during operation. No conditions relating to fugitive emissions are required on the works approval or licence.	Application supporting information
Odour	L2.7.1		Operation <u>Emission Description</u> <i>Emission:</i> Odour emissions generated from the processing of sewage. <i>Impact:</i> Nuisance odour. The accommodation facilities are located less than 200m away. Onslow is located 12km away. <i>Controls:</i> Process controls only. Influent and effluent tanks will be enclosed.	Application supporting information General provisions of the <i>Environmental Protection Act 1986</i>



DECISION TABLE				
Works Approval / Licence section	Condition number W = Works Approval L = Licence	OSC or NSC	Justification (including risk description & decision methodology where relevant)	Reference documents
			<p><u>Risk Assessment</u> <i>Consequence:</i> Insignificant <i>Likelihood:</i> Unlikely <i>Risk Rating:</i> Low</p> <p><u>Regulatory Controls</u> OSC L2.7.1 is included on the licence to ensure that the odour does not impact the health, welfare or amenity of any person not on the premises.</p> <p><u>Residual Risk</u> <i>Consequence:</i> Insignificant <i>Likelihood:</i> Unlikely <i>Residual Risk Rating:</i> Low</p>	
Noise	L2.8	N/A	The construction and operation of the STP is not expected to produce significant noise and can be appropriately regulated via the <i>Environmental Protection (Noise) Regulations 1997</i> .	<i>Environmental Protection (Noise) Regulations 1997</i>
Monitoring general	W3.1.1 L3.1.1 – L3.1.4	OSC	Conditions are included on the works approval and licence setting monitoring requirements to ensure that wastewater samples are collected in accordance with the applicable standard and submitted to a NATA accredited laboratory for analysis. Licence conditions also ensure that monitoring equipment is appropriately maintained and calibrated.	N/A
Monitoring of inputs and outputs	W3 L3.6.1	N/A	Licence condition L3.6.1 is included on the licence requiring the Licensee to monitor the quality of each waste stream prior to being directed to the irrigation area. Water quality targets are also included. This condition will be updated to include monitoring requirements and water quality targets specific to the CV Camp Expansion STP. Refer to Appendix A for further details.	Application supporting information



DECISION TABLE				
Works Approval / Licence section	Condition number W = Works Approval L = Licence	OSC or NSC	Justification (including risk description & decision methodology where relevant)	Reference documents
Process monitoring	W3 L3.7.1	OSC	No specified conditions relating to process monitoring are required on the works approval or licence.	N/A
Ambient quality monitoring	W3 L3.8	N/A	No specified conditions relating to ambient quality monitoring are required on the works approval or licence.	N/A
Meteorological monitoring	W3 L3.9	N/A	No specified conditions relating to meteorological monitoring are required on the works approval or licence.	N/A
Improvements	W4 L4	N/A	No specified conditions relating to improvements are required on the works approval or licence.	N/A
Information	W5.1.1 – W5.1.4 W5.2 L5.1 – L5.3	OSC	<p>Construction/Commissioning OSC W5.1.3 and W5.1.4 require the submission of a commissioning report providing results of water quality monitoring conducted during commissioning to verify that the STP is achieving expected performance criteria.</p> <p>OSC W5.2.1 requires notification to DER at the commencement and completion of the 3 month commissioning period.</p> <p>Operation Standard reporting conditions are included on the licence requiring the submission of an Annual Environmental Report. Notification requirements are set under OSC L5.3.</p>	N/A
Licence Duration	N/A	N/A	The licence is due to expire in July 2017. No changes to the duration of the licence are proposed.	N/A



5 Advertisement and consultation table

Date	Event	Comments received/Notes	How comments were taken into consideration
25/05/2015	Application advertised in The West Australian (or other relevant newspaper)	No comments received	N/A
18/5/2015	Application referred to interested parties listed: <ul style="list-style-type: none">• Shire of Ashburton.	No comments received	N/A
19/6/2015	Proponent sent a copy of draft instrument	Minor comments received. The application mistakenly indicated the plant is capable of achieving a Total Nitrogen concentration in treated effluent of 15mg/L. The manufacturer's specification indicates that 30mg/L is achievable. The proponent assessed that this increase in Total Nitrogen output does not significantly alter the environmental risk.	Documents updated to reflect change. Appendix A details DER's assessment of emissions to land.



6 Risk Assessment

Note: This matrix is taken from the DER Corporate Policy Statement No. 07 - Operational Risk Management

Table 1: Emissions Risk Matrix

Likelihood	Consequence				
	Insignificant	Minor	Moderate	Major	Severe
Almost Certain	Moderate	High	High	Extreme	Extreme
Likely	Moderate	Moderate	High	High	Extreme
Possible	Low	Moderate	Moderate	High	Extreme
Unlikely	Low	Moderate	Moderate	Moderate	High
Rare	Low	Low	Moderate	Moderate	High



Appendix A

Emissions to land including monitoring

The expected water quality outputs from the CV Camp Expansion STP are provided in Table 1. As shown in the table, the expected effluent levels meet recognised standards outlined in the Australian Guidelines for Sewerage Systems – Effluent Management (ANZECC, 1997).

Table 1: Expected performance standards for water quality

Parameter	Expected performance standard	ANZECC Guideline standard*	% of guideline
Nitrogen	<30mg/L	20-50mg/L	60%
Phosphorus	<10mg/L	6-12 mg/L	83%
Biochemical Oxygen Demand (5-day BOD)	<15mg/L	20-30mg/L	50%
Total Suspended Solids (TSS)	<20mg/L	25-40mg/L	50%
<i>E. coli</i>	<1 cfu/100 mL	10 ⁵ – 10 ⁶ org/100mL (for <i>E.Coli</i>)	<1%

* ANZECC, 1997. The guideline standards in this table refer to evapo-transpiration (irrigation) of wastewater which has undergone secondary treatment (Class C).

Sludge removal

Sludge from the STP will either be trucked or piped to the existing Construction Village STP dewatering belt press for processing, prior to being removed from site.

Effluent disposal

Effluent will be disposed of via irrigation to the two existing irrigation fields totalling an area of 26.2ha.

Assessment of the risk to human health from the irrigation of treated wastewater is managed via approval from the Department of Health (DoH) under the *Health Act 1911*.

There are currently two other STPs operating at the Ashburton North Village that discharge to the irrigation fields; the 600 EP STP and Fly Camp STP (Table 2). Addition of the CV Camp STP will not result in exceedances of the nutrient loading rates specified in Department of Water (DoW), Water Quality Protection Note 22 (WQPN22). Nutrient levels will be determined prior to discharge to ensure that the nutrient loading rate is consistent with WQPN22. Other disposal methods such as reuse for dust suppression or trucking excess effluent from site can be implemented to ensure that loading rates are being achieved.

Table 2: Nutrient Application rates

Parameter	Nitrogen			Phosphorus		
Irrigation Area	26.2 ha					
Maximum Capacity (per plant) (m ³ /day)	168	205	168	168	205	168
Expected Effluent Quality from each STP (mg/L)	30	20	30	10	8	10
Total output per day (kg/day)	5	4.1	5	1.7	1.6	1.7
Total output (kg/day)	14.1			5		
Nutrient Loading (based on maximum capacity) ¹	196 kg/ha/year			70 kg/ha/year		
Guideline*	480 kg/ha/year			120 kg/ha/year		

*DoW WQPN22. This calculation was based on Risk Category D defined.



Emission Risk Assessment – Commissioning and Operations

Emission description

Emission: Disposal of treated effluent from the STP to the irrigation area.

Impact: Water quality above ANZECC guidelines and WQPN22. Activities on the Premises may cause contamination of surrounding land and groundwater. Excessive nutrient application may impact soil structure and quality. The Premises is located in the Pilbara region where evaporation rates are high and exceed annual rainfall. There is potential for localised impacts and minor breach of legal requirements if effluent disposal is not appropriately managed.

Controls: Commissioning of the STP will occur over a 3 month period. During this time, water quality monitoring will be undertaken on a weekly basis to verify plant performance. Once operational, monitoring will be undertaken quarterly to ensure ongoing operational performance is maintained. Nutrient loading rates will be monitored on a weekly basis to confirm compliance with the nutrient loading limits. Audits and inspections of the WWTP and irrigation field will also be conducted.

Risk Assessment

Consequence: Minor

Likelihood: Possible

Risk rating: Moderate

Regulatory Controls

Conditions are included on the Works Approval requiring weekly monitoring of the treated effluent during the 3 month commissioning period. A commissioning report is required to be submitted following commissioning to confirm that the STP is performing as expected.

Conditions are included on the Licence setting limits for nutrient loading rates. Conditions will also be included setting monitoring requirements and water quality targets to ensure that nutrient loading limits are achieved.

OSC L1.3.4 is included on the licence to ensure that discharge only occurs to the designated irrigation area or is reused for construction purposes.

OSC L1.3.6 is included on the licence to ensure that the irrigation area is appropriately managed to prevent ponding, runoff and weed growth.

Residual Risk

Consequence: Minor

Likelihood: Rare

Risk rating: Low