

Appendix AA

Chinchilla Weir Beneficial Use Scheme BUA



Appendix AA: Chinchilla Beneficial Use Scheme BUA

Rev [0]

[April 2012]



Introduction

Appendix X contains two documents relevant to Section **14.7.1 Chinchilla Beneficial Use Scheme** of the Stage 2 WMMP.

The first document is correspondence from SEWPaC, which states that the Chinchilla Weir and Pipeline Project was not deemed a controlled action. This letter, issued on 15 July, 2011, confirms that the proposed action did not require further assessment under the EPBC Act other than the initial referral and hence was able to proceed.

The second document is the Beneficial Use Approval (permit number ENBU02701811) administered by DERM regarding the Chinchilla Beneficial Use Scheme. The BUA outlines the following conditions:

- Limits on the resource and its use (water quality, quantity, and period of use)
- Management of the resource (release conditions, resource management plan, water supply agreements and third party auditing)
- Monitoring and reporting (requirements and schedules)



Mr Mark Browne
General Manager Infrastructure
Development
SunWater Limited
Level 10, 179 Turbot Street
PO Box 15536 City East
BRISBANE QUEENSLAND 4002

Date: 15 July 2011
EPBC Ref: 2011/6000
EPBC contact: Ms Celeste Powell
02 6274 1625
Celeste.Powell@environment.gov.au

Dear Mr Browne

**Decision on referral
Chinchilla Weir Discharge and Pipeline Project, QLD**

This is to advise you of my decision, under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act), about the proposed action to transport treated coal seam gas water via a 20km pipeline to discharge to the Condamine River at the Chinchilla Weir, Queensland

As a delegate of the Minister for Sustainability, Environment, Water, Population and Communities, I have decided that the proposed action is not a controlled action. This means that the proposed action does not require further assessment and approval under the EPBC Act before it can proceed.

A copy of the document recording this decision is enclosed. This document will be notified publicly on the Department's website.

Please note that this decision relates only to the specific matters protected under Chapter 2 of the EPBC Act.

This decision does not affect any requirement for separate state or local government environment assessment and approvals of the proposed action.

The Department has an active audit program for proposals that have been referred under the EPBC Act. The audit program aims to ensure that proposals are implemented as planned. You should be aware that your project may be selected for audit by the Department at any time and all related records and documents may be subject to scrutiny. Information about the Department's audit strategy is enclosed.

If you have any questions about the referral process or this decision, please contact the EPBC project manager and quote the EPBC reference number shown at the beginning of this letter.

Yours sincerely

David Calvert
A/g Assistant Secretary
Environment Assessment Branch



**Notification of
REFERRAL DECISION – not controlled action**

Chinchilla Weir Discharge and Pipeline Project, QLD (EPBC 2011/6000)

This decision is made under Section 75 of the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act).

Proposed action

person named in the referral SunWater Limited
ACN: 131 034 985

proposed action The action involves the construction and operation of a 20 km water supply pipeline and disposal of up to 85ML/day of treated coal seam gas water into Chinchilla Weir (See EPBC Act referral 2011/6000).

Referral decision: Not a controlled action

status of proposed action The proposed action is not a controlled action.

Person authorised to make decision

Name and position David Calvert
A/g Assistant Secretary
Environment Assessment Branch

signature

date of decision 15 July 2011

Notice

Approval of resource for beneficial use

This notice is issued by the administering authority, pursuant to section 66F of the *Environmental Protection (Waste Management) Regulation 2000* to advise you of a decision by the administering authority and your review and appeal rights.

SunWater Limited
Lvl 10, 179 Turbot Street
BRISBANE QLD 4000
Attention: Lisa Cecchi

Our reference : CBD/033478
 : 361415

Re: Application for approval of treated CSG water by SunWater Limited

Your application for an approval of a resource (treated CSG water sourced from the QGC Kenya Water Treatment Plant) received by this office on 28 April 2011 has been granted.

This approval is subject to the conditions set out in the attached schedule issued in accordance with section 66M of the *Environmental Protection (Waste Management) Regulation 2000*.

In accordance with s66F(1) of the Regulation:

- This approval is a specific approval.
- SunWater Limited has the benefit of the approval.
- The period of the approval is for a total period of twenty four (24) years from the date of issue.

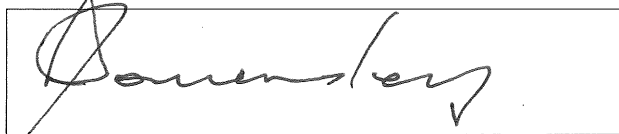
For clarity, Condition (A6) limits the use of the resource to twenty (20) years from the date of issue and a further four (4) year period of the approval comprises a three (3) year period of monitoring and one (1) additional year for reporting and assessment.

You may apply to the administering authority for a review of this decision within 10 days after receiving this Notice. You may also appeal against this decision to the Planning and Environment Court. Information outlining the review and appeal processes under the *Environmental Protection Act 1994* is included with this Notice. This information is intended as a guide only you may have other legal rights and obligations.

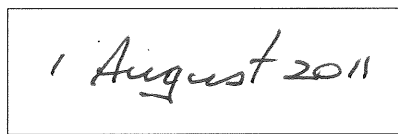
continued next page ...

Should you have any queries in relation to this Notice, please contact Ian Eskdale on the telephone listed below.

Yours sincerely,



Signature



Date

Jon Womersley
Director, Regulatory Support & Practice
Environment and Natural Resource Regulation
Department of Environment and Resource Management

Enquiries:
Ian Eskdale
Ph: 07 3330 5734
Email: ian.eskdale@derm.qld.gov.au

SCHEDULE A: CONDITIONS

SCHEDULE OF CONDITIONS

This approval incorporates the following schedule of conditions.

Schedule A Limits on the resource and its use

Schedule B Management of the Resource

Schedule C Monitoring and Reporting

APPENDIX 1 - Definitions

SCHEDULE A: LIMITS ON THE RESOURCE AND ITS USE

RESOURCE LIMITED TO STATED TYPE AND QUALITY

- (A1) The resource is reverse osmosis (RO) permeate left over from coal seam gas production authorised under the petroleum legislation and the *Environmental Protection Act 1994*, and is sourced from the Kenya Water Treatment Plant operated by QGC Pty Limited and located on petroleum tenement PL228.
- (A2) The characteristics of the resource must not exceed the quality limits stated in Schedule A - Table 1.

Schedule A - Table 1 Quality limits for resource and monitoring frequency prior to release into the Kenya to Chinchilla Pipeline

Characteristic of resource	Quality Limit	Limit Type	Monitoring frequency
Electrical conductivity* ($\mu\text{S}/\text{cm}$)	500	Maximum	Continuous
pH (pH Unit)*	6.5 – 8.5	Range	Continuous
Total Suspended Solids (mg/L)	175	Maximum	Monthly
Calcium (mg/L)	6	Minimum	Weekly
Chloride (mg/L)	135	Maximum	Weekly
Fluoride (mg/L)	0.5	Maximum	Weekly
Magnesium (mg/L)	4.5	Minimum	Weekly
Sodium (mg/L)	95	Maximum	Weekly
Sulphate (mg/L)	8.8	Maximum	Weekly
Total Dissolved Solids	320	Maximum	Weekly
Alkalinity (mg/L)	20	Minimum	Weekly
SAR	6	Maximum	Weekly
Boron (mg/L)	1.0	Maximum	Weekly

**in-situ, continuous or field monitoring*

NOTE: in-situ or continuous monitoring does not require NATA laboratory analysis

- (A3) The characteristics of the resource must not exceed the quality limits stated in Schedule A - Table 2 prior to release into Chinchilla Weir.

Schedule A - Table 2 Quality limits for resource and monitoring frequency prior to release into Chinchilla Weir

Characteristic of resource	Quality Limit	Limit Type	Monitoring frequency
Dissolved oxygen (mg/L)*	4	Minimum	Continuous

** in-situ, continuous or field monitoring*

NOTE: in-situ or continuous monitoring does not require NATA laboratory analysis

- (A4) The Kenya to Chinchilla Pipeline must have control valve at the discharge point to Chinchilla Weir that allows the release of the resource to be stopped when necessary.

RESOURCE LIMITED TO STATED USES

- (A5) The use of the resource is permitted for agricultural production (irrigation and stock watering), and when drawn from the Chinchilla Weir, for raw urban water supply.

RESOURCE LIMITED TO USE OVER STATED PERIOD

- (A6) The use of the resource is limited to a maximum quantity of 31,025 megalitres per annum for a period of twenty (20) years from the date the first treated water is released into the Kenya to Chinchilla pipeline.
- (A7) The holder of this approval must be able to demonstrate through its monitoring, record keeping and water balance analyses that:
 - a) the take of water from Chinchilla Weir and the Condamine river downstream of Chinchilla Weir is equivalent to the volume of the resource released into the Chinchilla Weir after allowing for storage losses from Chinchilla Weir and transmission losses from downstream deliveries; and
 - b) downstream deliveries do not pass the end of the Chinchilla Weir Water Supply scheme that terminates at 643.7km AMTD.
- (A8) The volume of resource released into the Kenya to Chinchilla Pipeline must not exceed a volume equivalent to the aggregated total of "Maximum Monthly Contracted Volumes" under all CSG Water Supply Agreements and must be monitored on a monthly basis and reported in accordance with Condition (C26).
- (A9) The holder of this approval must investigate, and within two months, report to the administering authority on any increase of groundwater level of 0.5 metres or greater against the baseline assessment of the standing water level measured in the shallowest aquifer encountered underlying the irrigation site (as per condition (C17)).

- END OF SCHEDULE A -

SCHEDULE B MANAGEMENT OF THE RESOURCE

RELEASE OF THE RESOURCE INTO CHINCHILLA WEIR

- (B1) The resource must be released from the Kenya to Chinchilla Pipeline into the Chinchilla Weir via a discharge outlet structure located at Northing 32271.25 and Easting 59335.54.
- (B2) Release of the resource into the Chinchilla Weir must not interfere with the natural integrity of the bed and banks of the receiving waters, or cause a material build up of sediment in those waters.
- (B3) Release of the resource into the Chinchilla Weir must be undertaken in a way that minimises the impact on the turbidity of the receiving waters.

RESOURCE MANAGEMENT PLAN (RMP)

- (B4) The holder of this approval must develop, implement and maintain a Resource Management Plan (RMP) that has as its principal objective the management of the resource in ways that will not result in material harm, serious harm or environmental nuisance.
- (B5) The RMP must deal with all matters relevant to achieving the principal objective, and in doing so address the following matters:
 - a) control measures to minimise the likelihood of environmental harm from use of the resource;
 - b) control measures to ensure that the resource is not stored for later direct or indirect disposal into the environment;
 - c) mapping of soils characteristics to a scale less than or equal to 1: 50,000;
 - d) the criteria (e.g. – occurrence of waterlogging, salinity scalds, measures of plant health) that will be used to determine when the irrigation of the resource should be limited or stopped and when remediation measures commence;
 - e) a detailed description of the remediation measures which could be implemented on a case by case basis;
 - f) the monitoring activities required by this approval;
 - g) periodic review of monitoring data and findings;
 - h) a register of CSG Water Supply Agreements;
 - i) arrangements for record keeping and staff training; and
 - j) amendment of the RMP to maintain its currency.
- (B6) The RMP must contain control measures for irrigation with the resource that achieve all of the following outcomes:
 - a) the unsaturated or vadose zone not becoming saturated within 100 years from when the action (irrigation with CSG water) starts;
 - b) the concentration of salts in the saturated zone (the shallowest aquifer encountered) not increasing above initial baseline conditions in the aquifer underlying the irrigation area as a result of use of the resource;
 - c) use of the resource not resulting in water runoff outside of the areas irrigated or surface ponding;
 - d) limitation or cessation of use of the resource if monitoring indicates water, soil or groundwater quality parameters exceed the limits at any of the monitoring points specified in this approval;
 - e) water application rates not exceeding the cumulative water deficit since the previous irrigation event with an allowance for irrigation efficiency;
 - f) during wet weather events:
 - i. irrigation ceasing if soil moisture levels reach saturation; and
 - ii. recommencing only once soil moisture levels return to the optimum water deficit for maximum efficiency of irrigation; and
 - g) use of best practice irrigation such as scheduling, monitoring and record keeping techniques, including use of soil moisture sensors, calculation of evapotranspiration (Penman-Monteith method), and paddock application rate records.

- (B7) The initial RMP must be submitted to the administering authority before the commencement of the use of the resource.
- (B8) The holder of this approval must submit details of any amendment to the RMP to the administering authority within 10 business days of making the amendments.

CSG WATER SUPPLY AGREEMENTS

- (B9) The holder of this approval must not, without a written CSG Water Supply Agreement between the two parties, supply the resource to a third party user of the resource.
- (B10) The CSG Water Supply Agreement must contain contractual obligations on a third party user of the resource that achieve compliance with conditions of this approval that are relevant to the user's activity.

THIRD PARTY AUDITING

- (B11) Compliance with the conditions of this approval must be audited by a suitably qualified and experienced third party auditor, nominated by the holder of this approval and accepted by the administering authority, within 14 months of the date of issue of this approval, and then again every 5 years from the date of issue of this approval.
- (B12) The third party auditor must certify the findings of the audit in relation to compliance with the requirements of this approval.
- (B13) The financial cost of the third party audit is to be borne by the holder of this approval.
- (B14) The holder of this approval must consider the recommendations made in the audit report and within twenty (20) business days after the completion of the third party audit submit the audit report to the administering authority together with written advice stating the:
 - a) actions taken by the holder to ensure compliance with this approval; and
 - b) actions taken to prevent a recurrence of any non-compliance issues identified.

- END OF SCHEDULE B -

SCHEDULE C MONITORING AND REPORTING

GENERAL

- (C1) The holder of this approval must develop and implement a comprehensive monitoring program that is sufficient when implemented, to provide early detection of any adverse impacts to soils, surface water and groundwater from the use of the resource.
- (C2) The monitoring program must be developed, implemented and maintained by a person possessing appropriate qualifications and experience in the assessment and monitoring of ecological communities and the impact of agricultural activities.
- (C3) The monitoring program must deal with all matters relevant to detecting adverse impacts and in doing so addresses the following:
 - a) the rationale for the program conceptualisation and the verification of assumptions that form part of the program;
 - b) the monitoring strategy to be used and the locations of monitoring points;
 - c) the methods for sampling, analysis and interpretation all monitoring results;
 - d) any historical or third party data sets to be relied upon;
 - e) description of the statistical basis on which conclusions are to be drawn, and
 - f) the nature and location of analogue, control or reference sites to be used.
- (C4) The monitoring program must be submitted to the administering authority prior to commencement of the use of the resource.
- (C5) Baseline levels for all parameters that will indicate impacts to environmental values must be characterised before commencing the use of the resource.
- (C6) All testing required by this approval, unless specified otherwise, is to be done by a laboratory that has National Association of Testing Authorities (NATA) certification, recognised testing procedures and analyses to a detection level that will enable comparison to the relevant limits set out in Schedule A – Table 1 and Schedule C - Table 3.
- (C7) The monitoring programs for groundwater and soil must use the parameters and frequency and location set out in Schedule C - Table 3.
- (C8) Samples taken as part of the monitoring programs for groundwater and soil must be analysed for the water or soil quality parameters in Schedule C - Table 3.

MONITORING OF RESOURCE RELEASED INTO AND FROM THE PIPELINE

- (C9) The characteristics of the resource as stated in Schedule A - Table 1 must be measured and recorded prior to release into the Kenya to Chinchilla Pipeline.
- (C10) The quantity of the resource released into the Kenya to Chinchilla Pipeline must be measured and recorded.
- (C11) The monitoring point for the release of the resource into the Kenya to Chinchilla Pipeline is at the inlet chamber to the treated water pump station prior to release into the pipeline.
- (C12) The quantity of the resource taken from the Kenya to Chinchilla Pipeline for use must be measured and recorded at each user off-take point along the pipeline.
- (C13) The characteristics of the resource as stated in Schedule A - Table 2 must be measured and recorded prior to release into Chinchilla Weir.
- (C14) The quantity of the resource released into Chinchilla Weir must be measured and recorded.

- (C15) The monitoring point for the release of the resource into the Kenya to Chinchilla Weir is the discharge outlet structure located at Northing 32271.25 and Easting 59335.54.

MONITORING OF CHINCHILLA WEIR AND CONDAMINE RIVER

- (C16) The monitoring program must, for the Chinchilla Weir and Condamine River, address the following:
- (a) description of potentially affected receiving waters including key ecological communities and background water quality characteristics based on accurate and reliable monitoring data that takes into consideration any temporal variation (e.g. seasonality);
 - (b) description of applicable environmental values, including but not limited to:
 - i. hydrology (flow, duration, periodicity, connectivity with groundwater systems);
 - ii. physiochemical properties;
 - iii. aquatic ecosystem parameters including flora and fauna habitat; and
 - iv. geomorphological features;
 - (c) description of water quality objectives to be achieved (i.e. as scheduled pursuant to the *Environmental Protection (Water) Policy 2009*);
 - (d) water quality targets within the receiving environment to be achieved, and clarification of contaminant concentrations or levels indicating adverse environmental impacts;
 - (e) monitoring for any potential adverse environmental impacts caused by the release with particular reference to:
 - i. the potential flow on effects of a change in water turbidity (e.g. algal blooms and predator-prey populations);
 - ii. the potential impact of low natural flows that result in the resource being the bulk of the water in the catchment;
 - iii. the influence of low calcium/magnesium release concentrations on local receiving waters; and
 - iv. the contribution of releases to changes in electrical conductivity levels in the Chinchilla Weir and Condamine River below the weir.
 - (f) monitoring of stream flow and hydrology;
 - (g) consideration of sodic soils and potential for water course bank slumping and elevation of stream salinity;
 - (h) monitoring of physical chemical parameters (refer to the quality limits stated in Schedule A - Table 1 and Schedule A – Table 2);
 - (i) monitoring biological indicators;
 - (j) monitoring of a selection of species (as a minimum investigate at least three species of invertebrates from the local receiving environment) to assess ecosystem health in respect to the availability of calcium and magnesium (necessary for the formation of exo-skeletal structures (e.g. zoo- and phytoplankton, diatoms));
 - (k) the frequency or scheduling of sampling and analysis should be sufficient to undertake annual condition assessment and to derive site specific reference values within two (2) years (depending on wet season flows) in accordance with the most recent version of the "Queensland Water Quality Guidelines". For ephemeral streams, this should focus on periods of stream flow.

GROUNDWATER MONITORING

- (C17) The groundwater component of the monitoring program must:
- (a) be developed, implemented and maintained by a person possessing appropriate qualifications and experience in the fields of hydrogeology and groundwater monitoring program design;
 - (b) include the procedures to establish background groundwater quality;
 - (c) include an assessment to establish baseline groundwater standing water levels and quality in the aquifers underlying the irrigation sites (the baseline assessment should take into account seasonal variation);
 - (d) establish the magnitude of change in groundwater levels that will indicate impacts to environmental values; and
 - (e) include monitoring for the potential build up of groundwater as 'perched water tables' above the bedrock at a sufficient number of shallow bores at locations specified in the program.

- (C18) All groundwater bores must be installed in accordance with the standards set out in the current edition of the Minimum Construction Requirements for Water Bores in Australia and the Minimum standards for the construction and reconditioning of water bores that intersect the sediments of artesian basins in Queensland or any DERM standard that may supersede them.
- (C19) Water monitoring bores must be constructed by, or under the supervision of a licensed Queensland water bore driller who has the correct endorsements on their licence for the type of activity being performed.
- (C20) The method of water sampling and all assessment of groundwater quality required by this approval must comply with those set out in the latest edition of the Department of Environment and Resource Management's Monitoring and Sampling Manual.

SOIL MONITORING

- (C21) The soil component of the monitoring program must:
 - a) be developed, implemented and maintained by a person possessing appropriate qualifications and experience in the fields of soil science and soil monitoring program design; and
 - b) include procedures to establish background soil characteristics (surface and subsoil structure, soil profiles and soil chemistry).
- (C22) The soil component of the monitoring program must comply with standard procedures and terminology set out in the *Australian Soil and Land Survey Handbooks no. 1 (CSIRO 2009)*, and reference the laboratory method used for the testing selected from Rayment & Lyons (2011), and include reasons for using the method.
- (C23) The holder of the approval must ensure visual monitoring of the soil within the irrigation area is undertaken at appropriate times to identify potential soil impacts (e.g. compaction, surface sealing/crusting, dispersion, hard pans, waterlogging and problems associated with reduced infiltration).

REPORTING

- (C24) The holder of this approval must:
 - (a) Within 6 months of the granting of this approval, submit a report to the administering authority establishing the groundwater quality of the shallowest aquifer encountered to be used as the baseline assessment; and
 - (b) Within 12 months of the granting of this approval, submit a report to the administering authority establishing the groundwater standing water level of the shallowest aquifer encountered to be used as the baseline assessment.
- (C25) The holder of this approval must prepare and submit a report to the administering authority 2 years after commencing use of the resource, and every 2 years thereafter; that:
 - (a) analyses the monitoring data collected in compliance with Condition (C16);
 - (b) assesses the nature and cause of any environmental changes in relation to the Chinchilla Weir and Condamine River;
 - (c) assesses the overall impact of low calcium/magnesium release concentrations; and
 - (d) assesses the contribution of releases to changes in the electrical conductivity levels in the Chinchilla Weir and Condamine River below the weir.
- (C26) The holder of this approval must submit an annual report to the administering authority on its performance against the conditions of this approval. The annual report must:

- (a) summarise and present the monitoring data in a tabular form, with an assessment of that data as it relates to the requirements of this approval; and
 - (b) summarise actions which have been taken or will be taken to adjust management of any issues that have been identified by monitoring.
- (C27) The holder of this approval must prepare and submit to the administering authority three (3) years after ceasing use of the resource, a report that includes:
- (a) all monitoring results required by the conditions in Schedule C; and
 - (b) a summary of any environmental impacts in relation to the use of the resource.

RECORDS

- (C28) The holder of this approval must record and compile all monitoring results for the duration of the approval plus keep all records for a further five (5) years.

Schedule C - Table 3 - Monitoring Schedule

Activity	Parameters [measuring units]	Limits	Monitoring frequency	Monitoring Points
Meteorological conditions	Relative Humidity [%] ¹	No limit	Daily	1 point that provides representative data for the irrigation area
	Wind Speed [km/h or m/s] ¹			
	Wind Direction [unitless] ¹			
	Air Temperature [°C] ¹			
	Penman-Monteith Evapotranspiration Equation (calculated) [mm/day]			
Groundwater	Water Level [m AHD] (on applicable bores)	0.5 m change from baseline	6 monthly	No less than one (1) (bores or piezometers) in the uppermost aquifer or potential aquifer material No less than one in the Condamine Alluvium.
	Flow Rate [m ³ /h] (on applicable bores)	+/- 10% deviation from baseline levels.		
	Electrical Conductivity [µS/cm]			
	pH [unitless]			
	Total Dissolved Solids [mg/L]			
	Dissolved Oxygen [% sat and ppm]			
	Ortho-Phosphorus			
	Nitrate-N [mg/L]			
	Standard ionic chemistry suite			
	Sulphur as SO ₄ [mg/L]			
	Chloride [mg/L]			
Soil moisture	Soil Water [% & mm/m] ¹	Not to exceed saturation as a result of an irrigation	Refer to Monitoring Program	Refer to Monitoring Program
Soil cores	Electrical Conductivity (saturated extract – EC _{se}) [dS/m] (measured or calculated from a 1:5 soil water extract using appropriate conversion algorithms)	5 dS/m (maximum EC _{se}) for weighted average rootzone salinity (to 2m)	12 Monthly	1 core every 2 irrigation zones. Each soil horizon must be sampled, with a minimum of at least one sample from each soil horizon, and a minimum of 3 samples between 0 cm and 100 cm depth, with a representative spread across the depth range.
	pH [unitless] (measured on a 1:5 soil water extract)	<20% deviation from baseline values		
	Soil Organic Carbon (SOC) [%]	No limit		
	Exchangeable Calcium [meq/100g] ⁴			
	Exchangeable Magnesium [meq/100g] ⁴			

Activity	Parameters [measuring units]	Limits	Monitoring frequency	Monitoring Points
	Exchangeable Potassium [meq/100g] ⁴			
	Exchangeable Sodium [meq/100g] ⁴			
	Cation Exchange Capacity (CEC) [meq/100g] ⁴			
	Exchangeable Sodium Percentage (ESP) [%]	<20% change from baseline for relevant profile depth		
	Ca:Mg Ratio [unitless]	No limit		
	Calcium Carbonate [%]			
	Nitrate (measured on a 1:5 soil water extract) [mg/kg]			
	Sulphate [mg/kg]			
	Total Sulphur [mg/kg]			
	Chloride [mg/kg] (measured on a 1:5 soil water extract)	Not sufficient to increase EC _e (salt content of soil solution at saturation moisture) above stated limit		

Note 1: Parameters measured in-situ or through continuous monitoring do not require NATA laboratory analysis.

2: Using appropriate methods as per Table 15.2 in Rayment & Lyons, (2011), Soil Chemical Methods Australasia and reference the laboratory method used for the testing and correlated to the method codes by Rayment & Lyons (2011).

- END OF SCHEDULE C -

APPENDIX 1 DEFINITIONS

For terms not defined within this approval, the definitions in the *Environmental Protection Act 1994*, its Regulation and Environmental Protection Policies should be used in the first instance.

administering authority	the Department of Environment and Resource Management (DERM) or its successor.
AMTD	Adopted Middle Thread Distance
Chinchilla Weir	includes the pool/pond area behind the weir structure
CSG Water Supply Agreement	a contractual arrangement between SunWater and a potential customer in relation to the use of the resource.
Kenya to Chinchilla Pipeline	The pipeline transporting the resource from the Kenya Water Treatment Plant to Chinchilla Weir
Kenya Water Treatment Plant	Includes its associated treated water ponds.
Rayment & Lyons (2011)	Rayment and Lyons, (2011), <i>Soil Chemical Methods Australasia</i> , CSIRO Publishing.
petroleum legislation	means the <i>Petroleum Act 1923</i> , the <i>Petroleum and Gas (Production and Safety) Act 2004</i> and the <i>Petroleum (Submerged Lands) Act 1982</i> .
resource	see Condition (A1)
SAR	sodium adsorption ratio
waters	includes river, stream, lake, lagoon, pond, swamp, wetland, unconfined surface water, artificial watercourse, bed and bank of any watercourse, dams that are not fit for purpose, non-tidal or tidal waters (including the sea), stormwater channel, stormwater drain, roadside gutter, stormwater run-off, and groundwater and any part-thereof.

- END OF APPROVAL -

Review and Appeal Processes (*Environmental Protection Act 1994*)

521 Procedure for review

1. A dissatisfied person may apply for a review of an original decision.
2. The application must—
 - (a) be made in the approved form to the administering authority within—
 - (i) 10 business days after the day on which the person receives notice of the original decision or the administering authority is taken to have made the decision (the **review date**); or
 - (ii) the longer period the authority in special circumstances allows; and
 - (b) be supported by enough information to enable the authority to decide the application.
3. On or before making the application, the applicant must send the following documents to the other persons who were given notice of the original decision—
 - (a) notice of the application (the **review notice**);
 - (b) a copy of the application and supporting documents.
4. The review notice must inform the recipient that submissions on the application may be made to the administering authority within 5 business days after the application is made to the authority.
5. If the administering authority is satisfied the applicant has complied with subsections (2) and (3), the authority must, within 10 business days after receiving the application—
 - (a) review the original decision; and
 - (b) consider any submissions properly made by a recipient of the review notice; and
 - (c) make a decision (the **review decision**) to—
 - (i) confirm or revoke the original decision; or
 - (ii) vary the original decision in a way the administering authority considers appropriate.
6. The application does not stay the original decision.
7. The application must not be dealt with by—
 - (a) the person who made the original decision; or
 - (b) a person in a less senior office than the person who made the original decision.
8. Within 10 business days after making the review decision, the administering authority must give written notice of the decision to the applicant and persons who were given notice of the original decision.
9. The notice must—
 - (a) include the reasons for the review decision; and
 - (b) inform the persons of their right of appeal against the decision.
10. If the administering authority does not comply with subsection (5) or (8), the authority is taken to have made a decision confirming the original decision.
11. Subsection (7) applies despite the *Acts Interpretation Act 1954*, section 27A.
12. This section does not apply to an original decision made by—
 - (a) for a matter, the administration and enforcement of which has been devolved to a local government—the local government itself or the chief executive officer of the local government personally; or
 - (b) for another matter—the chief executive personally.
13. Also, this section does not apply to an original decision to issue a clean-up notice.

522 Stay of operation of original decisions

1. If an application is made for review of an original decision, the applicant may immediately apply for a stay of the decision to—
 - (a) for an original decision mentioned in schedule 2, part 1—the Land Court; or
 - (b) for an original decision mentioned in schedule 2, part 2—the Court.
2. The Land Court or the Court may stay the decision to secure the effectiveness of the review and any later appeal to the Land Court or the Court.
3. A stay may be given on conditions the Land Court or the Court considers appropriate and has effect for the period stated by the Land Court or the Court.
4. The period of a stay must not extend past the time when the administering authority reviews the decision and any later period the Land Court or the Court allows the applicant to enable the applicant to appeal against the review decision.

531 Who may appeal

1. A dissatisfied person who is dissatisfied with a review decision, other than a review decision to which subdivision 1 applies, may appeal against the decision to the Court.
 2. The chief executive may appeal against another administering authority's decision (whether an original or review decision) to the Court.
 3. A dissatisfied person who is dissatisfied with an original decision to which section 521 does not apply may appeal against the decision to the Court.
-

