

Notice

Water Act 2000

Notice of approval of underground water impact report

This statutory notice is issued by the chief executive¹ pursuant to section 385(4) of the Water Act 2000 to advise you of the decision to approve your underground water impact report.

Anglo Coal (Moranbah North Management) Pty Ltd
201 Charlotte Street
BRISBANE CITY QLD 4000

Your reference: Moranbah North Extension UWIR – ML700042

Attention: Ross Edwards,

Dear Sir

Re: Notice of approval of underground water impact report

The chief executive received the underground water impact report described below.

1. Report details

Date underground water impact report received: 29 October 2020

In relation to: ML700042

2. Decision

The chief executive has approved the underground water impact report with conditions. Please find attached the conditions of approval (Attachment A). The approved report takes effect on 28 January 2021.

3. Public notice

As per section 386 of the *Water Act 2000*, within 10 business days after receiving this notice of approval, you must

- publish a notice about the approval on your website that states that copies of the approved report may be obtained from you and how the copies may be obtained; and

¹ The Department of Environment and Science is the chief executive for Chapter 3 of the *Water Act 2000*.

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- give a copy of this notice of approval to each bore owner of a water bore within the area to which the report relates.

Within 15 business days after receiving this notice of approval, you must advise the chief executive that you have complied with the requirements outlined above.

4. Penalties

Under section 386(1) of the *Water Act 2000*, failure to comply with this direction notice is an offence.

- A maximum penalty for an individual is 50 penalty units, totalling \$6,672.5
- A maximum penalty for a corporation is 250 penalty units, totalling \$33,362.5

If you have any questions regarding this notice please contact Forough Ghasemi on the telephone number listed below.

Yours sincerely,



Signature

28 January 2021

Date

Tristan Roberts
Manager
Department of Environment and Science
Delegate of the chief executive
Water Act 2000

Enquiries:
Forough Ghasemi
400 George Street, Brisbane QLD 4000
Telephone: 07 3330 5557
Email: Forough.ghasemi@des.qld.gov.au

Attachments

Attachment A - Conditions of approval

Attachment A- Conditions of approval

Annual Review

(1) The **responsible entity** must submit to the **chief executive** a summary of the annual review required under section 376(e)(ii) of the Water Act 2000, within 20 business days after each **anniversary day**, or another date agreed to in writing by the chief executive. The annual review must provide an analysis and a statement of whether there has been a material change in the information or predictions used to determine the IAA.

Monitoring

(2) The Groundwater must be monitored at the locations and frequencies defined in *Table 1: Groundwater Monitoring Locations and Frequencies and Levels* for the parameters identified in *Table 2: Groundwater Quality Monitoring*.

Table 1: Groundwater Monitoring Locations and Frequencies and Levels

Monitoring Point	Longitude (decimal degree, AGD84)	Latitude (decimal degree, AGD84)	Frequency of Groundwater Quality Monitoring	Frequency of Groundwater Level Monitoring	Groundwater Surface RL (mAHD) ¹	Target Unit
TWM17008A	148.0653744	-21.8612064	Quarterly	Monthly	245.85	Alluvium
TWM17007A	146.060175	-21.8595236	Quarterly	Monthly	261.00	Tertiary Sediments above Basalt
TWM17010B	148.0611252	-21.8374937	Quarterly	Monthly	298.69	Tertiary Basalt
TWM17008B	148.0654	-21.8611	Not Required	Monthly	250.57	Permian Coal Measures

Note:

¹ mAHD denotes metres above Australia Height Datum

Table 2: Groundwater Quality Monitoring

Parameter	Unit	Trigger Type	Limit Type
pH	pH Units	As per Table 3	Minimum/Maximum
Electrical Conductivity (EC)	µS/cm	As per Table 3	Maximum
Sulfate (SO ₄)	mg/L	As per Table 3	Maximum
Aluminium (Al)	mg/L	As per Table 3	Maximum
Arsenic (As)	mg/L	As per Table 3	Maximum
Iron (Fe)	mg/L	As per Table 3	Maximum
Molybdenum (Mo)	mg/L	As per Table 3	Maximum
Selenium (Se)	mg/L	As per Table 3	Maximum

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Total Recoverable Hydrocarbons (TRH) C6 – C9 Fraction	µg/L	As per Table 3	Maximum
Total Recoverable Hydrocarbons (TRH) C10 – C36 Fraction	µg/L	As per Table 3	Maximum
Sodium (Na)	mg/L	No trigger	Not Applicable
Magnesium (Mg)	mg/L	No trigger	Not Applicable
Calcium (Ca)	mg/L	No trigger	Not Applicable
Potassium (K)	mg/L	No trigger	Not Applicable
Chloride (Cl)	mg/L	No trigger	Not Applicable
Bicarbonate Alkalinity as CaCO ₃	mg/L	No trigger	Not Applicable

- (3) Groundwater levels must be monitored at the locations and frequencies defined in *Table 1: Groundwater Monitoring Locations and Frequencies and Levels*.
- (4) Subject to the requirements of condition (2), if the groundwater investigation trigger levels defined in Table 3: Groundwater Investigation Trigger Values are exceeded then the responsible entity must complete an investigation into the potential for environmental harm and notify the chief executive within 28 days of receiving the analysis results.
- (5) The responsible entity must undertake a review to determine whether the groundwater investigation trigger values as set out in Table 3: Groundwater Investigation Trigger Values for groundwater monitoring bores TWM17008A, TWM17007A and TWM17010B are suitable for detecting a significant change to groundwater quality values and provide a copy of the review to the chief executive on or before 1 November 2021.
- (6) In the event that groundwater level fluctuations in excess of two metres per year beyond predictable seasonal fluctuations are detected at the groundwater monitoring locations nominated in Table 1: Groundwater Monitoring Locations and Frequencies and Levels, an investigation must be undertaken within 14 days of detection to determine if the groundwater level fluctuations are a result of:
- the mining activities carried out on ML700042 by the responsible entity; or
 - pumping from licensed bores; or
 - seasonal variation.

If the results of the investigation identify that the groundwater level fluctuations are a result of the mining activities carried out on ML700042 by the responsible entity, the responsible entity must notify the chief executive and provide a copy of a report detailing the findings and outcomes of the investigation within 7 days of receiving the result.

Table 3: Groundwater Investigation Trigger Values

Monitoring Point	pH	EC	SO ₄	Al	As	Fe	Mo	Se	TRH C6–C9	TRH C10–C36
Unit	pH Units	µS/cm	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	µg/L
TWM17008A	<6.5 or	5,964	79	0.07	0.013	0.3	0.034	0.01	20	100

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	>8.5									
TWM17007A	<6.5 or >8.5	19,230	946	0.07	0.013	0.3	0.034	0.01	20	100
TWM17010B	<6.5 or >8.5	15790	1061	0.07	0.013	0.3	0.034	0.01	20	100

- (7) All monitoring required of the responsible entity under the **UWIR** must be undertaken by a **suitably qualified person**.
- (8) All laboratory analyses and tests of monitoring undertaken under the UWIR must be carried out by a laboratory that has **NATA** accreditation for such analyses and tests.
- (9) Notwithstanding condition (3), where there are no laboratories that have NATA accreditation for a specific analyte or substance, then duplicate samples must be sent to at least two separate laboratories for independent testing or evaluation.
- (10) The methods of groundwater sampling required by the UWIR must comply with the latest edition of the *Queensland Monitoring and Sampling Manual, AS/NZS 5667:11 1998 Water Sampling Guidelines – Part 11 Guidance on sampling groundwater*, and the Australian Government’s *Groundwater Sampling and Analysis – A Field Guide (2009:27 GeoCat #6890.1)* as relevant as may change from time to time.

DEFINITIONS

Anniversary day means each anniversary of the day the first UWIR took effect – 28 January.

Chief executive means the Director-General of the department responsible for administering Chapter 3 of the *Water Act 2000* or the persons delegated the powers of the chief executive as stated in the *Water Act (EHP-Chief Executive) Delegation (No. 1) 2017* or subsequent versions.

NATA accreditation means accreditation by the National Association of Testing Authorities Australia.

Responsible entity means Anglo Coal (Moranbah North Management) Pty Ltd in accordance with section 368 of the *Water Act 2000*.

Suitably qualified person means a person who has professional qualifications, training, skills or experience relevant to the nominated subject matter and can give authoritative assessment, advice and analysis to performance relative to the subject matter using the relevant protocols, standards, methods or literature.

UWIR means the underground water impact report prepared by Hansen Bailey for ML700042 dated September 2020.