Permit

Environmental Protection Act 1994

Environmental authority

This environmental authority is issued by the administering authority under Chapter 5 of the Environmental Protection Act 1994.

Environmental authority number: EPML00443913

Environmental authority takes effect on 24 April 2026

The anniversary date of this environmental authority is 16 May each year. The payment of the annual fee will be due each year on this day.

An annual return will be due each year on 01 April.

Environmental authority holder(s)

Name(s)	Registered address
TAROOM COAL PROPRIETARY LIMITED	Level 18 175 Eagle Street Brisbane, Qld. 4000

Environmentally relevant activity and location details

Environmentally relevant activity/activities	Location(s)
Schedule 3 13: Mining black coal	ML50254 ML50270 ML50271
Ancillary 08 - Chemical Storage 3 - Storing more than 500 cubic metres of chemicals of class C1 or C2 combustible liquids under AS 1940 or dangerous goods class 3 under subsection (1)(c)	
Ancillary 31 - Mineral processing 2(b) - Processing, in a year, the following quantities of mineral products, other than coke - more than 100,000t	
Ancillary 33 Crushing, grinding, milling or screening more than 5000t of materials in a year.	
Ancillary 60 - Waste disposal 1(a) - Operating a facility for disposing of, in a year, the following quantity of waste mentioned in subsection (1)(a) - less than 50,000t	
Ancillary 63 - Sewage Treatment 1(b-i) - Operating sewage treatment works, other than no-release works, with a total daily peak design capacity of more than 100 but not more than 1500EP if treated effluent is discharged from the works to an infiltration trench or through an irrigation scheme	

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Additional information for applicants

Environmentally relevant activities

The description of any environmentally relevant activity (ERA) for which an environmental authority (EA) is issued is a restatement of the ERA as defined by legislation at the time the EA is issued. Where there is any inconsistency between that description of an ERA and the conditions stated by an EA as to the scale, intensity or manner of carrying out an ERA, the conditions prevail to the extent of the inconsistency.

An EA authorises the carrying out of an ERA and does not authorise any environmental harm unless a condition stated by the EA specifically authorises environmental harm.

A person carrying out an ERA must also be a registered suitable operator under the *Environmental Protection Act 1994* (EP Act).

Contaminated land

It is a requirement of the EP Act that an owner or occupier of land give written notice to the administering authority if they become aware of the following:

- the presence of, or happening of an event involving, a hazardous contaminant on the land that is causing, or is reasonably likely to cause, serious or material environmental harm (notice must be given within 24 hours); or
- if the land is contaminated land – a change in the condition of the land that is causing, or is reasonably likely to cause, serious or material environmental harm (notice must be given within 24 hours); or
- a notifiable activity (as defined in Schedule 3) having been carried out, or is being carried out, on the land (notice must be given within 20 business days);

For further information, including the form for giving written notice, refer to the Queensland Government website www.qld.gov.au, using the search term 'duty to notify'.

Take effect

Please note that, in accordance with section 200 of the EP Act, an EA has effect:

a) if the authority is for a prescribed ERA and it states that it takes effect on the day nominated by the holder of the authority in a written notice given to the administering authority ─ on the nominated day; or

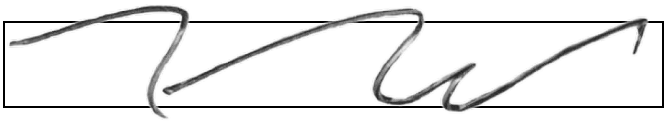
b) if the authority states a day or an event for it to take effect ─ on the stated day or when the stated event happens; or

c) otherwise ─ on the day the authority is issued.

However, if the EA is authorising an activity that requires an additional authorisation (a relevant tenure for a resource activity, a development permit under the *Planning Act 2016* or an SDA Approval under the *State Development and Public Works Organisation Act 1971*), this EA will not take effect until the additional authorisation has taken effect.

If this EA takes effect when the additional authorisation takes effect, you must provide the administering authority written notice within 5 business days of receiving notification of the related additional authorisation taking effect.

If you have incorrectly claimed that an additional authorisation is not required, carrying out the ERA without the additional authorisation is not legal and could result in your prosecution for providing false or misleading information or operating without a valid environmental authority.



Signature

24 April 2026

Date

Ben Byrd
Department of the Environment, Tourism, Science and Innovation
Delegate of the administering authority
Environmental Protection Act 1994

Enquiries:
Business Centre Coal
PO Box 3028, EMERALD QLD 4720
Phone: **07 4987 9320**
Email: CRMining@detsi.qld.gov.au

Obligations under the *Environmental Protection Act 1994*

In addition to the requirements found in the conditions of this environmental authority, the holder must also meet their obligations under the EP Act, and the regulations made under the EP Act. For example, the holder must comply with the following provisions of the Act:

- general environmental duty (section 319)
- duty to notify environmental harm (section 320-320G)
- offence of causing serious or material environmental harm (sections 437-439)
- offence of causing environmental nuisance (section 440)
- offence of depositing prescribed water contaminants in waters and related matters (section 440ZG)
- offence to place contaminant where environmental harm or nuisance may be caused (section 443)

Other permits required

This permit only provides an approval under the *Environmental Protection Act 1994*. In order to lawfully operate you may also require permits / approvals from your local government authority, other business units within the department and other State Government agencies prior to commencing any activity at the site. For example, this may include permits / approvals with your local Council (for planning approval), the Department of Transport and Main Roads (to access State controlled roads), the Department of Natural Resources and Mines, Manufacturing and Regional and Rural Development (to clear vegetation), and the Department of Primary Industries (to clear marine plants or to obtain a quarry material allocation).

Obligations under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act)

Matters of national environmental significance (MNES) are regulated under the Commonwealth EPBC Act rather than under state legislation. You may need to submit a referral if your project potentially impacts any matters protected under the EPBC Act. For more information on self-assessments, and referral and assessment processes please visit the Department of Climate Change, Energy, the Environment and Water webpage, https://www.dcceew.gov.au/environment/epbc/advice.

Development Approval

This permit is not a development approval under the *Planning Act 2016*. The conditions of this environmental authority are separate, and in addition to, any conditions that may be on the development approval. If a copy of this environmental authority is attached to a development approval, it is for information only, and may not be current. Please contact the Department of the Environment, Tourism, Science and Innovation to ensure that you have the most current version of the environmental authority relating to this site.

Schedules of conditions

A: General
B: Air
C: Waste
D: Noise
E: Groundwater
F: Water
G: Sewage
H: Land
I: Permanent watercourse diversions
J: Regulated Structures
K: Figures
Definitions

Conditions of environmental authority

Agency interest: General	
Condition number	**Condition**
A1	This environmental authority authorises environmental harm referred to in the conditions. Where there is no condition or this environmental authority is silent on a matter, the lack of a condition or silence does not authorise environmental harm.
A2	This environmental authority authorises the mining of **eight million two hundred thousand (8.2 million) tonnes run of mine (ROM) coal per annum**.
A3	The holder of this environmental authority must: (a) install all measures, plant and equipment necessary to ensure compliance with the conditions of this environmental authority; (b) maintain such measures, plant and equipment in a proper and efficient condition; (c) operate such measures, plant and equipment in a proper and efficient manner; and (d) ensure all instruments and devices used for the measurement or monitoring of any parameter under any condition of this environmental authority are properly calibrated.
A4	The holder of this environmental authority must comply with conditions of this environmental authority during all phases of the project including the construction and decommissioning phases.
A5	**Monitoring** Except where specified otherwise in another condition of this environmental authority, all monitoring records or reports required by this environmental authority must be kept for a period of not less than **five (5) years**.
A6	**Risk Management** The holder of this environmental authority must develop and implement a risk management system for mining activities which mirrors the content requirement of the Standard for Risk Management (ISO31000:2009), or the latest edition of an Australian standard for risk management, to the extent relevant to environmental management, at least **three (3) months** prior to the commencement of open cut coal mining activities (not including exploration activities).
A7	**Notification of emergencies, incidents and exceptions** The holder of this environmental authority must notify the administering authority by written notification within **twenty-four (24) hours**, after becoming aware of any emergency or incident which results in the release of contaminants not in accordance, or reasonably expected to be not in accordance with, the conditions of this environmental authority.

A8	Within **ten (10) business days** following the initial notification of an emergency or incident, or receipt of monitoring results, whichever is the latter, further written advice must be provided to the administering authority, including the following: (a) results and interpretation of any samples taken and analysed; (b) outcomes of actions taken at the time to prevent or minimise unlawful environmental harm; and (c) proposed actions to prevent a recurrence of the emergency or incident.
A9	**Complaints** The holder of this environmental authority must record all environmental complaints received about the mining activities including: (a) name, address and contact number of the complainant; (b) time and date of complaint; (c) reasons for the complaint; (d) investigations undertaken; (e) conclusions formed; (f) actions taken to resolve the complaint; (g) any abatement measures implemented; and (h) person responsible for resolving the complaint.
A10	The holder of this environmental authority must, when requested by the administering authority, undertake relevant specified monitoring within a reasonable timeframe nominated or agreed to by the administering authority to investigate any complaint of environmental harm. The results of the investigation (including an analysis and interpretation of the monitoring results) and abatement measures, where implemented, must be provided to the administering authority within **ten (10) business days** of completion of the investigation, or no later than **ten (10) business days** after the end of the timeframe nominated by the administering authority to undertake the investigation.
A11	**Third Party Reporting** The holder of this environmental authority must: (a) within one year of the commencement of open cut coal mining activities (not including exploration activities) obtain from an appropriately qualified person a report on compliance with the conditions of this environmental authority; (b) obtain further such reports at regular intervals, not exceeding **three-yearly intervals**, from the completion of the report referred to above; and (c) provide each report to the administering authority within **ninety (90) days** of its completion.

A12	Where a condition of this environmental authority requires compliance with a standard, policy or guideline published externally to this environmental authority and the standard is amended or changed subsequent to the issue of this environmental authority, the holder of this environmental authority must: (a) comply with the amended or changed standard, policy or guideline within two years of the amendment or change being made, unless a different period is specified in the amended standard or relevant legislation, or where the amendment or change relates specifically to regulated structures referred to in conditions **J1**-**J31** (inclusive), the time specified in that condition; and (b) until compliance with the amended or changed standard, policy or guideline is achieved, continue to remain in compliance with the corresponding provision that was current immediately prior to the relevant amendment or change.

Agency interest: Air	
Condition number	**Condition**
B1	The holder of this environmental authority shall ensure that all reasonable and feasible avoidance and mitigation measures are employed so that the dust and particulate matter emissions generated by the mining activities do not cause exceedances of the following levels when measured at any sensitive or commercial place: (a) Dust deposition of 120 milligrams per square metre per day, averaged over one month, when monitored in accordance with the most recent version of Australian Standard AS3580.10.1 Methods for sampling and analysis of ambient air—Determination of particulate matter—Deposited matter – Gravimetric method. (b) A concentration of particulate matter with an aerodynamic diameter of less than 10 micrometres (PM_{10}) suspended in the atmosphere of 50 micrograms per cubic metre over a 24-hour averaging time, for no more than five exceedances recorded each year, when monitored in accordance with the most recent version of either: 1. Australian Standard AS3580.9.6 Methods for sampling and analysis of ambient air—Determination of suspended particulate matter—PM_{10} high volume sampler with size-selective inlet – Gravimetric method, or 2. Australian Standard AS3580.9.9 Methods for sampling and analysis of ambient air—Determination of suspended particulate matter—PM_{10} low volume sampler—Gravimetric method. (c) A concentration of particulate matter suspended in the atmosphere of 90 micrograms per cubic metre over a 1 year averaging time, when monitored in accordance with the most recent version of AS/NZS3580.9.3:2003 Methods for sampling and analysis of ambient air—Determination of suspended particulate matter—Total suspended particulate matter (TSP)—High volume sampler gravimetric method.
B2	**Odour nuisance** The holder of this environmental authority shall ensure that all reasonable and feasible avoidance and mitigation measures are employed so that the noxious or offensive odour(s) or any other noxious or offensive airborne contaminant(s) generated by the mining activities do not cause an environmental nuisance at any sensitive or commercial place.
B3	**Management Plans** An Air Quality Management Plan must be developed and implemented by an appropriately qualified person during all stages of activities on the mining leases to which this environmental authority applies.

Agency interest: Waste	
Condition number	**Condition**
C1	**Waste Management** Unless otherwise permitted by the conditions of this environmental authority or with prior approval from the administering authority and in accordance with a relevant standard operating procedure, waste must not be burnt.
C2	The holder of this environmental authority may burn vegetation cleared in the course of carrying out extraction activities provided the activity does not cause environmental harm at any sensitive place or commercial place.
C3	**Tailings Disposal** Tailings must be managed in accordance with document procedures, developed prior to the commencement of mining activities. These procedures must include provisions for: (a) containment of tailings; (b) the management of seepage and leachates during operation; (c) the control of fugitive emissions to air; (d) a program of progressive sampling and characterisation to identify acid producing potential and metal concentrations of tailings; (e) maintaining records of the relative locations of any other waste stored within the tailings;
C4	**Storage of Tyres** Tyres stored awaiting disposal or transport for take-back and recycling, or waste-to-energy options, should be stockpiled in volumes less than **three (3) metres** in height and **two hundred (200) metres** squared in area and at least **ten (10) metres** from any other tyre storage area.
C5	All reasonable and practicable fire prevention measures must be implemented, including removal of grass and other materials within a **ten (10) metre** radius of the scrap tyre storage area.
C6	**Disposal of Tyres** Disposing of scrap tyres resulting from the mining activities in spoil emplacements is acceptable, provided the material is placed as deep in the spoil as reasonably practicable, aids long-term dump stability and does not impede saturated aquifers.
C7	**Management Plans** The holder of this environmental authority must ensure an appropriately qualified person develops and implements prior to commencement of the construction phase, a Waste Management Plan.

Agency interest: Noise	
Condition number	**Condition**
D1	**Noise Limits** The holder of this environmental authority must ensure that noise generated by the mining activities does not cause the criteria in **Table D1 – Noise limits** to be exceeded at a sensitive place or commercial place**.**

Table D1 – Noise limits

Noise Limits for Activities on the Mining Leases Leq, adj, T (T= 15 minutes to 1 hour), dB(A)*		
Daytime 7am-6pm	**Evening 6pm-10pm**	**Night-time 10pm-7am**
40	40	35

Notes: *To be achieved under the majority of adverse meteorological conditions.

D2	**Airblast overpressure nuisance** The holder of this environmental authority must ensure that blasting does not cause the limits for peak particle velocity and air blast overpressure in **Table D2 – Blasting noise limits** to be exceeded at a sensitive place or commercial place.

Table D2 – Blasting noise limits

Blasting noise limits	**Limits for sensitive or commercial receptors**
	7am - 6pm
Airblast overpressure	115 dB (Linear) Peak for 9 out of 10 consecutive blasts initiated and not greater than 120 dB (Linear) Peak at any time
Ground vibration peak particle velocity	5mm/second peak particle velocity for 9 out of 10 consecutive blasts and not greater than 10 mm/second peak particle velocity at any time

D3	**Monitoring and reporting** Noise monitoring and recording must include the following descriptor characteristics and matters: (a) LAN,T (where N equals the statistical levels of 1, 10 and 90 and T = 15 mins); (b) background noise LA90; (c) the level and frequency of occurrence of impulsive or tonal noise and any adjustment and penalties to statistical levels; (d) atmospheric conditions including temperature, relative humidity and wind speed and directions; (e) effects due to any extraneous factors such as traffic noise; (f) location, date and time of monitoring; and (g) if the complaint concerns low frequency noise, Max LpLIN,T and one third octave band measurements in dB(LIN) for centre frequencies in the 10 – 200 Hz range.
D4	The holder of this environmental authority must ensure an appropriately qualified person develops and implements a blast monitoring program to monitor compliance with **Table D2 – Blasting noise limits** prior to any blasting taking place on the mining leases this environmental authority applies to.

Agency interest: Groundwater	
Condition number	**Condition**
E1	The holder of this environmental authority must not release contaminants to groundwater.
E2	All determinations of groundwater quality monitoring must be performed by an appropriately qualified person.
E3	The holder of the environmental authority must implement a groundwater monitoring program which has been developed by an appropriately qualified person. The program must be able to detect if there is, or there is potential for, a significant change to groundwater quality values or standing water levels (based on the current suitability of the groundwater for domestic and agricultural use) due to activities that are part of this mining project.
E4	The holder of the environmental authority must report the results and analysis of groundwater monitoring to the administering authority on request.
E5	Groundwater affected by the mining activities must be monitored at compliance bores within the nominated geologies and minimum frequencies defined in **Table E1 – Groundwater monitoring locations and frequency.**

Table E1 – Groundwater monitoring locations and frequency

Aquifer [1 and 2]	**Minimum number of monitoring locations** [1 and 2]	**Minimum Monitoring Frequency**[1 and 2]
TBA	TBA	TBA
TBA	TBA	TBA

Note:
[1] To be completed prior to commencement of construction activities.
[2] Relevant aquifer/s, number of bores and monitoring frequencies to be determined by an appropriately qualified person.

E6	If the groundwater contaminant trigger levels defined in **Table E2 – Groundwater contaminant trigger levels** are exceeded then the environmental authority holder must complete an investigation into the potential for environmental harm and notify the administering authority within **twenty-eight (28) days** of receiving the analysis results. An action plan to mitigate potential harm must be developed by an appropriately qualified person.

Table E2 – Groundwater contaminant trigger levels*

Parameter	Unit	Trigger Levels	Limit Type
Groundwater Level	RL	TBA	Maximum
pH	pH Units	6.5 - 9.0	Minimum/Maximum
Electrical Conductivity	µS/cm	TBA	Maximum
Total Dissolved Solids	mg/L	TBA	Maximum
Calcium	mg/L	No limit	Interpretative purposes only #
Magnesium	mg/L	No limit	Interpretative purposes only#
Sodium	mg/L	No limit	Interpretative purposes only#
Potassium	mg/L	No limit	Interpretative purposes only#
Chloride	mg/L	No limit	Interpretative purposes only#
SO4	mg/L	No limit	Interpretative purposes only#
CO3	mg/L	No limit	Interpretative purposes only#
HCO3	mg/L	No limit	Interpretative purposes only#
PO_4	mg/L	TBA	TBA
NO_3	mg/L	TBA	TBA
Iron	mg/L	TBA	Maximum
Aluminium	mg/L	TBA	Maximum
Arsenic	mg/L	TBA	Maximum
Mercury	mg/L	TBA	Maximum
Antimony	mg/L	TBA	TBA
Total Petroleum Hydrocarbons			
TPH (C6-C9)	mg/L	TBA	Maximum
TPH (C10-C36)	mg/L	TBA	Maximum

* Interim trigger levels, final to be provided as per condition **E7**.
# The measurement of cations and anions are used to interpret the groundwater chemistry and identify the groundwater source e.g. by using piper diagrams.

E7	**Determining Contaminant Trigger Level and Limit Type** The background groundwater quality for each geology must be determined from hydraulically isolated background bore(s) that have not been affected by any mining activities. The groundwater contaminant trigger levels and limit type as per **Table E2 – Groundwater contaminant trigger levels** must be determined and submitted to the administering authority prior to commencement of mine construction activities.
E8	**Bore construction and maintenance and decommissioning** The construction, maintenance and management of groundwater bores (including background and compliance groundwater monitoring bores) must be undertaken in a manner that prevents or minimises impacts to the environment and ensures the integrity of the bores to obtain accurate monitoring. For all bores constructed after February 2015, construction and decommissioning must be in accordance with the 'Minimum Construction Standard for Water Bores in Australia'.

Agency interest: Water	
Condition number	**Condition**
F1	**Contaminant release** Contaminants that will, or have the potential to cause environmental harm must not be released directly or indirectly to any waters as a result of the authorised mining activities, except as permitted under the conditions of this environmental authority.
F2	Unless otherwise permitted under the conditions of this environmental authority, the release of mine affected water to waters must only occur from the release points specified in **Table F1 - Mine affected water release points, sources and receiving waters*** and depicted in Schedule K Figure 1 – Mine affected water release points. **Remaining information to populate Table F1 must be submitted to the administering authority prior to the commencement of mine construction activities.*

Table F1 - Mine affected water release points, sources and receiving waters

Release point (RP)	Latitude (decimal degree, GDA2020)	Longitude (decimal degree, GDA2020)	Mine affected water source and location	Monitoring point	Receiving waters description
RP 1	TBD	TBD	Dam EV1	Dam spillway	Horse Creek
RP 2	TBD	TBD	Dam EV2	Dam spillway	Horse Creek
RP 3	TBD	TBD	Dam EV3	Dam spillway	Horse Creek
RP 4	TBD	TBD	Dam EV4	Dam spillway	Horse Creek

F3	The release of mine affected water to internal water management infrastructure installed and operated in accordance with a water management plan that complies with condition **F29** is permitted.
F4	The release of mine affected water to waters in accordance with condition **F2** must not exceed the release limits stated in **Table F2 - Mine affected water release limits** when measured at the monitoring points specified in **Table F1 - Mine affected water release points, sources and receiving waters**, for each quality characteristic listed in **Table F2 – Mine affected water release limits.**

Table F2 - Mine affected water release limits

Quality characteristic	Release limits	Monitoring frequency
Electrical conductivity (µS/cm)	Release limits specified in Table F4 for variable flow criteria or condition F11.	Daily during release (the first sample must be taken within two hours of commencement of release)
pH (pH Unit)	6.5 (minimum) 9.0 (maximum)	Daily during release (the first sample must be taken within two hours of commencement of release)
Sulphate (SO_4^{2-}) (mg/L)	250	Daily during release (first sample within two hours of commencement of release)

F5	The release of mine affected water to waters from the release points must be monitored at the locations specified in **Table F1 - Mine affected water release points, sources and receiving waters** for each quality characteristic and at the frequency specified in **Table F2 - Mine affected water release limits** and **Table F3 - Release contaminant trigger investigation levels, potential contaminants**.

Table F3 - Release contaminant trigger investigation levels, potential contaminants

Quality characteristic	Trigger levels (µg/L)	Comment on trigger level	Monitoring frequency
Aluminium	55	*For aquatic ecosystem protection, based on SMD guideline*	Commencement of release and thereafter weekly during release
Arsenic	13	*For aquatic ecosystem protection, based on SMD guideline*	
Cadmium	0.2	*For aquatic ecosystem protection, based on SMD guideline*	
Chromium	1	*For aquatic ecosystem protection, based on SMD guideline*	
Copper	2	*For aquatic ecosystem protection, based on LOR for ICPMS*	
Iron	300	*For aquatic ecosystem protection, based on low reliability guideline*	
Lead	4	*For aquatic ecosystem protection, based on SMD guideline*	
Mercury	0.2	*For aquatic ecosystem protection, based on LOR for CV FIMS*	
Nickel	11	*For aquatic ecosystem protection, based on SMD guideline*	
Zinc	8	*For aquatic ecosystem protection, based on SMD guideline*	
Boron	370	*For aquatic ecosystem protection, based on SMD guideline*	
Cobalt	90	*For aquatic ecosystem protection, based on low reliability guideline*	
Manganese	1900	*For aquatic ecosystem protection, based on SMD guideline*	
Molybdenum	34	*For aquatic ecosystem protection, based on low reliability guideline*	
Selenium	10	*For aquatic ecosystem protection, based on LOR for ICPMS*	
Silver	1	*For aquatic ecosystem protection, based on LOR for ICPMS*	
Uranium	1	*For aquatic ecosystem protection, based on LOR for ICPMS*	
Vanadium	10	*For aquatic ecosystem protection, based on LOR for ICPMS*	
Ammonia	900	*For aquatic ecosystem protection, based on SMD guideline*	
Nitrate	1100	*For aquatic ecosystem protection, based on ambient Qld WQ Guidelines (2006) for TN*	
Petroleum hydrocarbons (C6-C9)	20		
Petroleum hydrocarbons (C10-C36)	100		
Fluoride (total)	2000	*Protection of livestock and short term irrigation guideline*	

Notes:

1. All metals and metalloids must be measured as total (unfiltered) and dissolved (filtered). Trigger levels for metal/metalloids apply if dissolved results exceed trigger.

2. The quality characteristics required to be monitored as per Table F3 - Release contaminant trigger investigation levels, potential contaminants can be reviewed once the results of two years monitoring data is available, or if sufficient data is available to adequately demonstrate negligible environmental risk, and it may be determined that a reduced monitoring frequency is appropriate or that certain quality characteristics can be removed from Table F3 - Release contaminant trigger investigation levels, potential contaminants by amendment.
3. SMD – slightly moderately disturbed level of protection, guideline refers ANZECC & ARMCANZ (2000).
4. LOR – typical reporting for method stated. ICPMS/CV FIMS – analytical method required to achieve LOR.

F6	If quality characteristics of the release exceed any of the trigger levels specified in **Table F3 - Release contaminant trigger investigation levels, potential contaminants** during a release event, the environmental authority holder must compare the downstream results in the receiving waters to the trigger values specified in **Table F3 - Release contaminant trigger investigation levels, potential contaminants** and: (a) where the trigger values are not exceeded then no action is to be taken, or (b) where the downstream results exceed the trigger values specified **Table F3 - Release contaminant trigger investigation levels, potential contaminants** for any quality characteristic, compare the results of the downstream site to the data from background monitoring sites and: (1) if the result is less than the background monitoring site data, then no action is to be taken; or (2) if the result is greater than the background monitoring site data, complete an investigation into the potential for environmental harm and provide a written report to the administering authority within **ninety (90) days** of receiving the result, outlining: (i) details of the investigations carried out; and (ii) actions taken to prevent environmental harm. Note: Where an exceedance of a trigger level has occurred and is being investigated, in accordance with condition **F6(b)(2)** of this condition, no further reporting is required for subsequent trigger events for that quality characteristic.
F7	If an exceedance in accordance with condition **F6(b)(2)** is identified, the holder of the environmental authority must notify the administering authority in writing within **twenty-four (24) hours** of receiving the result.
F8	**Mine affected water release events** The holder must ensure a stream flow gauging station/s is installed, operated and maintained to determine and record stream flows at the locations and flow recording frequency specified in **Table F4 - Mine affected water release during flow events**.
F9	Notwithstanding any other condition of this environmental authority, the release of mine affected water to waters in accordance with condition **F2** must only take place during periods of natural flow in accordance with the receiving water flow criteria for discharge specified in **Table F4 - Mine affected water release during flow events** for the release point(s) specified in **Table F1 - Mine affected water release points, sources and receiving waters**.
F10	The release of mine affected water to waters in accordance with condition **F2** must not exceed the Maximum Release Rate (for all combined release point flows) for each receiving water flow criterion for discharge specified in **Table F4 - Mine affected water release during flow events** when measured at the monitoring points specified in **Table F1 - Mine affected water release points, sources and receiving waters**.

Table F4 - Mine affected water release during flow events

Receiving waters/ stream	Release point (RP)	Gauging station	Gauging station latitude (decimal degree, GDA2020)	Gauging station longitude (decimal degree, GDA2020)	Receiving water flow recording frequency	Receiving water flow and quality characteristics criteria for discharge (m^3/s)	Maximum release rate (for all combined RP flows)	Electrical conductivity release limits
Horse Creek	Dam EV1 RP1 Dam EV2 RP2 Dam EV3 RP3 Dam EV4 RP4	SM1	-26.08193	149.59139	Continuous (minimum daily)	Low Flow > 1.0m^3/s for a period of 28 days after natural flow events that exceed 1.0 m^3/s	<0.6 m^3/s Release duration is limited to 28 days after the trigger flow event ceases	Electrical conductivity <380 µS/cm
						Medium Flow > 1.0 m^3/s	<0.6 m^3/s	Electrical conductivity <1500 µS/cm
						Medium Flow > 2.0 m^3/s	<0.4 m^3/s	Electrical conductivity <3500 µS/cm
						High Flow > 4.0 m^3/s	<0.2 m^3/s	Electrical conductivity 8000 µS/cm

F11	The daily quantity of mine affected water released from each release point must be measured and recorded.
F12	Releases to waters must be undertaken so as not to cause erosion of the bed and banks of the receiving waters, or cause a material build-up of sediment in such waters.
F13	**Notification of release event** The environmental authority holder must notify the administering authority as soon as practicable and no later than **twenty-four (24) hours** after commencing to release mine affected water to the receiving environment. Notification must include the submission of written advice to the administering authority of the following information: (a) release commencement date/time; (b) details regarding the compliance of the release with the conditions of Agency interest: Water of this environmental authority (that is, contaminant limits, natural flow, discharge volume); (c) release point/s; (d) release rate; (e) release salinity; and (f) receiving water/s including the natural flow rate.
F14	The environmental authority holder must notify the administering authority as soon as practicable and nominally no later **than twenty-four (24) hours** after cessation of a release event of the cessation of a release notified under condition **F13** and within **twenty-eight (28) days** provide the following information in writing: (a) release cessation date/time; (b) natural flow rate in receiving water; (c) volume of water released; (d) details regarding the compliance of the release with the conditions of Agency interest; Water of this environmental authority (i.e. contaminant limits, natural flow, discharge volume); (e) all in-situ water quality monitoring results; and (f) any other matters pertinent to the water release event. Note: Successive or intermittent releases occurring within **twenty-four (24) hours** of the cessation of any individual release can be considered part of a single release event and do not require individual notification for the purpose of compliance with conditions **F13** and **F14**, provided the relevant details of the release are included within the notification provided in accordance with conditions **F13** and **F14**.
F15	**Notification of release event exceedance** If the release limits defined in **Table F2 – Mine affected water release limits** are exceeded, the holder of the environmental authority must notify the administering authority within **twenty-four (24) hours** of receiving the results.

F16	The environmental authority holder must, within **twenty-eight (28) days** of a release that is not compliant with the conditions of this environmental authority, provide a report to the administering authority detailing: (a) the reason for the release; (b) the location of the release; (c) the total volume of the release and which (if any) part of this volume was non-compliant; (d) the total duration of the release and which (if any) part of this period was non-compliant; (e) all water quality monitoring results (including all laboratory analyses); (f) identification of any environmental harm as a result of the non-compliance; (g) all calculations; and (h) any other matters pertinent to the water release event.
F17	**Receiving environment monitoring and contaminant trigger levels** The quality of the receiving waters must be monitored at the locations specified in **Table F6 – Receiving water upstream background sites and downstream monitoring points** for each quality characteristic and at the monitoring frequency stated in **Table F5 – Receiving waters contaminant trigger levels**. Monitoring points are shown in *Schedule K Figure 2*.

Table F5 - Receiving waters contaminant trigger levels

Quality Characteristic	Trigger Level	Trigger Type	Monitoring Frequency
pH (pH units)	6.5 – 9.0 pH	Range	Daily during the release
Electrical Conductivity (µS/cm)	700	Maximum	
Turbidity (NTU)	TBA (background figure to be provided)	Maximum	
Sulphate (SO_4^{2-}) (mg/L)	250mg/L	Maximum	

Note:
1. In-stream EC triggers based on *Model Water Conditions for Coal Mines in the Fitzroy Basin* (EHP 2013).
2. Trigger level based on EPP (Water) WQOs for Aquatic Ecosystems.
3. Trigger level based on ANZECC (2000) stock water quality guidelines.

Table F6 - Receiving water upstream background sites and downstream monitoring points

Monitoring points	Receiving waters location description	Latitude (decimal degree, GDA2020)	Longitude (decimal degree, GDA2020)
Upstream background monitoring points			
SM1	Horse Creek	-26.081931	149.591391
SM2	Horse Creek	-26.041375	149.6
SM4	Horse Creek	-25.996375	149.641119
Downstream monitoring points			
SM3	Horse Creek	-26.031930	149.629737
SM5	Horse Creek	-25.980544	149.651664
SM6	Nine Mile Creek	-25.974430	149.651115

F18	If quality characteristics of the receiving water at the downstream monitoring points exceed any of the trigger levels specified in **Table F5 – Receiving waters contaminant trigger levels** during a release event the environmental authority holder must compare the downstream results to the upstream results in the receiving waters and: (a) where the downstream result is the same or a lower value than the upstream value for the quality characteristic then no action is to be taken; or (b) where the downstream results exceed the upstream results complete an investigation into the potential for environmental harm and provide a written report to the administering authority in the next annual return, outlining: (1) details of the investigations carried out; and (2) actions taken to prevent environmental harm. Note: Where an exceedance of a trigger level has occurred and is being investigated, in accordance with condition **F18 (b)** of this condition, no further reporting is required for subsequent trigger events for that quality characteristic.
F19	All determinations of water quality and biological monitoring must be performed by an appropriately qualified person.
F20	**Receiving environment monitoring program (REMP)** The environmental authority holder must develop and implement a Receiving Environment Monitoring Program (REMP) to monitor, identify and describe any adverse impacts to surface water environmental values, quality and flows due to the authorised mining activity. This must include monitoring the effects of the mine on the receiving environment periodically (under natural flow conditions) and while mine affected water is being discharged from the site. For the purposes of the REMP, the receiving environment is the waters of Horse Creek to the confluence with Juandah Creek, approximately 20km downstream of the mining activity. The REMP should encompass any sensitive receiving waters or environmental values downstream of the authorised mining activity that will potentially be directly affected by an authorised release of mine affected water, including but not limited to the referrable wetland of high ecological significance 1km downstream of mining site boundary.
F21	The REMP required under condition **F20** must be in accordance with the Receiving Environment Monitoring Program guideline published by the administering authority.
F22	A REMP Design Document must be submitted prior to the commencement of mine affected water releases to receiving waters and describe how the REMP will address the criterion of condition **F21**. The REMP Design Document must be updated and resubmitted to the administering authority whenever the release activities change or the program is modified. Due consideration must be given to any comments made by the administering authority on the amended REMP Design Document and subsequent implementation of the program.
F23	A report outlining the findings of the REMP, including all monitoring results and interpretations outlined in condition **F21**, must be prepared annually and made available on request to the administrating authority. The reports will be due at twelve (12) month intervals following the submission of the initial REMP design document.

F24	**Water reuse** Mine affected water may be piped or trucked or transferred by some other means that does not contravene the conditions of this environmental authority and deposited into artificial water storage structures, such as farm dams or tanks, or used directly at properties owned by the environmental authority holder or a third party (with the consent of the third party).
F25	**Water Storage Monitoring** The holder of this environmental authority must maintain a register of water storages and must be monitored for water quality characteristics specified in **Table F7 – Water storage contaminant limits** at the monitoring locations and at the specified frequency. Monitoring is required when the period of time in which any water storage, contains water for a period of time that is equal to or greater than the frequency of monitoring listed in **Table F7 – Water storage contaminant limits**.
F26	In the event that water quality within water storages does not comply with the water quality characteristics specified in **Table F7 – Water storage contaminant limits**, the holder of this environmental authority must implement measures to prevent access by all livestock and minimise access by fauna to the water.

Table F7 – Water storage contaminant limits

Quality characteristics	Test value	Contaminant limit	Frequency of monitoring
pH (pH units)	Range	6 – 9	6 monthly
EC(µS/cm)	Maximum	4000	
Sulphate (mg/L)	Maximum	1,000	
Fluoride (mg/L)	Maximum	2.5	
Aluminium (mg/L)	Maximum	5	
Arsenic (mg/L)	Maximum	0.5	
Boron (mg/L)	Maximum	5	
Cadmium (mg/L)	Maximum	0.02	
Chromium (mg/L)	Maximum	1	
Cobalt (mg/L)	Maximum	1	
Copper (mg/L)	Maximum	1	
Lead (mg/L)	Maximum	0.1	
Molybdenum (mg/L)	Maximum	0.15	
Nickel (mg/L)	Maximum	1	
Selenium (mg/L)	Maximum	0.02	
Total Zinc (mg/L)	Maximum	20	

Note: Contaminant limits are based on ANZECC (2000) Livestock Drinking Water and are to be analysed as Total Metals (unfiltered).

F27	**Annual water monitoring reporting** The following information must be recorded in relation to all water monitoring required under the conditions of this environmental authority and submitted to the administering authority in the specified format: (a) the date on which the sample was taken; (b) the time at which the sample was taken; (c) the monitoring point at which the sample was taken; (d) the measured or estimated daily quantity of mine affected water released from all release points; (e) the release flow rate at the time of sampling for each release point; (f) the results of all monitoring and details of any exceedances of the conditions of this environmental authority; and (g) water quality monitoring data must be provided to the administering authority in the specified electronic format upon request.
F28	**Temporary interference with waterways** Destroying native vegetation, excavating, or placing fill in a watercourse, lake or spring necessary for and associated with mining operations must be undertaken in accordance with Department of Natural Resources and Mines (or its successor) *Guideline – Activities in a Watercourse, Lake or Spring associated with Mining Activities.*
F29	**Water Management Plan** A Water Management Plan must be developed and implemented by an appropriately qualified person during all stages of activities on the mining leases to which this environmental authority applies.
F30	**Stormwater and Sediment Controls** An Erosion and Sediment Control Plan must be developed by an appropriately qualified person and implemented for all stages of the mining activities on the site to minimise erosion and the release of sediment to receiving waters and contamination of stormwater.
F31	Stormwater, other than mine affected water, is permitted to be released to waters from: (a) erosion and sediment control structures that are installed and operated in accordance with the Erosion and Sediment Control Plan required by condition **F30**; and (b) water management infrastructure that is installed and operated, in accordance with a Water Management Plan that complies with condition **F29**, for the purpose of ensuring water does not become mine affected water.

Agency interest: Sewage	
Condition number	**Condition**
G1	The only contaminant permitted to be released to land is treated sewage effluent in compliance with the release limits stated in **Table G1 – Contaminant release limits to land**.

Table G1 – Contaminant release limits to land

Contaminant	Unit	Release limit	Limit type	Frequency
5 day Biochemical oxygen demand (BOD)1	mg/L	20	Maximum	Monthly
Total suspended solids	mg/L	30	Maximum	Monthly
Nitrogen	mg/L	30	Maximum	Monthly
Phosphorus	mg/L	15	Maximum	Monthly
E-coli	Organisms/100ml	1000	Maximum	Monthly
pH	pH units	6.0 – 9.0	Range	Monthly

G2	The application of treated effluent to land must be carried out in a manner such that: (a) vegetation is not damaged; (b) there is no surface ponding of effluent; and (c) there is no run-off of effluent.
G3	If areas irrigated with effluent are accessible to employees or the general public, prominent signage must be provided advising that effluent is present and care should be taken to avoid consuming or otherwise coming into unprotected contact with the effluent.
G4	All sewage effluent released to land must be monitored at the frequency and for the parameters specified in **Table G1 – Contaminant release limits to land**.
G5	The daily volume of effluent release to land must be measured and records kept of the volumes of effluent released.
G6	When circumstances prevent the irrigation or beneficial reuse of treated sewage effluent such as during or following rain events, waters must be directed to a wet weather storage or alternative measures must be taken to store/lawfully dispose of effluent.

Agency interest: Land	
Condition number	**Condition**
H1	**PRCP schedule** Progressive rehabilitation of the disturbed land must be carried out in accordance with the approved Progressive Rehabilitation and Closure Plan (PRCP) schedule (P-PRCP-100818609) for this environmental authority.
H2	**Surrender** The holder must meet the conditions and the rehabilitation milestones under the PRCP schedule prior to the surrender of the environmental authority

H3	**Biodiversity Offset** Impacts to prescribed environmental matters are not authorised unless the impacts are authorised in condition **H4**.
H4	Notwithstanding condition **H3**, impacts to prescribed environmental matters, are only authorised to occur for the prescribed environmental matters specified in **Table H1 – Authorised impacts to prescribed environmental matters**, the impacts do not exceed the maximum extent of impact specified for that prescribed environmental matter.
H5	An environmental offset must be delivered for each impact specified in **Table H1 – Authorised impacts to prescribed environmental matters** as requiring an environmental offset.
H6	The authority holder may carry out the prescribed activity in stages and deliver an environment offset for each stage of the activity.

Table H1 – Authorised impacts to prescribed environmental matters

Matters of state environmental significance		Maximum extent of impact	Significant Impact	Environmental offset required
Regulated Vegetation				
Endangered RE	*RE 11.9.5*	*18.9ha*	*Yes*	*Yes*
Of Concern RE	*RE 11.9.10*	*12.7ha*	*Yes*	*Yes*
	RE 11.3.2 (10% of RE 11.3.25 / 11.3.2)	*16.9ha*	*Yes*	*Yes*
RE occurring within defined distance of defining banks of a relevant watercourse	*RE 11.9.5*	*4.6ha*	*Yes*	*Yes*
	RE 11.9.10	*5.5ha*	*Yes*	*Yes*
	RE 11.10.11	*0.04ha*	*No*	*No*
	RE 11.3.2 (10% of RE 11.3.25 / 11.3.2)	*12.2ha*	*Yes*	*Yes*
	RE 11.3.25 (plus 90% of RE 11.3.25 / 11.3.2)	*113.9ha*	*Yes*	*Yes*
Protected Wildlife Habitat				
Special least concern species	*Echidna*	*Covered by above residual impacts*	*Yes*	*Yes*

H7	Prior to the commencement of any impacts to a prescribed environmental matter for which an environmental offset is required by condition **H5**, an analysis of the anticipated maximum extent of impact for each stage to each prescribed environmental matter must be provided to the administering authority.
H8	The analysis of impacts required by condition **H7** must be approved by the administering authority before the notice of election is given to the administering authority.
H9	The notice of election must be provided to the administering authority no less than **three (3) months** before the proposed commencement of the prescribed activities.

Agency interest: Watercourse Diversions	
Condition number	**Condition**
I1	**Permanent watercourse diversions** Permanent watercourse diversions, or the re-establishment of a pre-existing watercourse where a temporary watercourse diversion is being replaced, must be designed and constructed to: (a) incorporate natural features (including geomorphic and vegetation) present at the location of the diversion; (b) maintain the pre-existing hydrologic characteristics of surface water and groundwater systems for the area in which the watercourse diversion is located; (c) maintain the hydraulic characteristics of the permanent watercourse diversion that are equivalent to other local watercourses and are suitable for the area in which the diversion is located without using artificial structures that require on-going maintenance; (d) maintain sediment transport and water quality regimes that allow the diversion to be self-sustaining, while minimising any impacts to upstream and downstream water quality, geomorphology or vegetation; and (e) maintain equilibrium and functionality in all substrate conditions at the location of the diversion.
I2	**Temporary watercourse diversions** Temporary watercourse diversions must be designed and constructed to: (a) maintain the pre-existing hydrologic characteristics of surface water systems for the area in which the watercourse diversion is located; (b) maintain the hydraulic characteristics of the watercourse diversion that are equivalent to other local watercourses and are suitable for the area in which the diversion is located. Where structures that require on-going maintenance are used, they must not compromise the equilibrium and performance of the temporary watercourse diversion and adjoining watercourses; (c) maintain sediment transport and water quality regimes that minimise any impacts to upstream and downstream water quality, geomorphology or vegetation; (d) maintain equilibrium and functionality at all substrate conditions at the location of the diversion.
I3	**Design plan – All diversions** A certified design plan (diversion) that achieves condition **I1** for permanent watercourse diversions and condition **I2** for temporary watercourse diversions must be submitted to the administering authority at least **ten (10) business days** before commencing construction of the diversion.
I4	The certified design plan (diversion) for any temporary or permanent watercourse diversion must be consistent with the functional design/s that formed a part of the application documents for this authority.

I5	**Construction and operation – All diversions** A certified set of 'as constructed' drawings and specifications must be submitted to the administering authority within **sixty (60) business days** from the completion of construction of the temporary or permanent watercourse diversion, or re-establishment of the pre-existing watercourse. These drawings and specifications must state: (a) that the 'as constructed' drawings and specifications meet the original intent of the design plan (diversion) for the watercourse diversion; and (b) construction of the watercourse diversion is in accordance with the design plan (diversion).
I6	**Monitoring and inspections – All diversions** The watercourse diversion must be inspected by a suitable qualified and experienced person who must prepare an inspection report in accordance with the operation and monitoring plan contained within the certified design plan (diversion). The timing and frequency of inspections must be in accordance with those specified in the operation and monitoring plan contained within the certified design plan (diversion). Note: Inspection requirements included in the operation and monitoring plan do not prevent the authority holder undertaking additional inspections.
I7	The holder must, within **twenty (20) business days** of preparing an inspection report in accordance with the operation and monitoring plan, provide the administering authority: (a) The recommendations section of the inspection report; and (b) If applicable, a report on any actions being taken in response to those recommendations. If, following receipt of the recommendations and (if applicable) actions, the administering authority, requests a full copy of the inspection report from the holder, provide this to the administering authority within **ten (10) business days** of receipt of the request.
I8	**Register – All diversions** The details of watercourse diversions planned and constructed under an environmental authority must be accurately recorded on the Register of Watercourse Diversions kept by the holder of the authority. An electronic copy must be provided to the administering authority on request.

Agency interest: Regulated Structures	
Condition number	**Condition**
J1	**Assessment of consequence category** The consequence category of any structure must be assessed by a suitably qualified and experienced person in accordance with the Manual for assessing consequence categories and hydraulic performance of structures (ESR/2016/1933) at the following times: (a) prior to the design and construction of the structure, if it is not an existing structure; or (b) prior to any change in its purpose or the nature of its stored contents.
J2	A consequence assessment report and certification must be prepared for each structure assessed and the report may include a consequence assessment for more than one structure.
J3	Certification must be provided by the suitably qualified and experienced person who undertook the assessment, in the form set out in the Manual for assessing consequence categories and hydraulic performance of structures (ESR/2016/1933).
J4	**Design and construction of a regulated structure** All regulated structures must be designed by, and constructed under the supervision of, a suitably qualified and experienced person in accordance with the requirements of the Manual for assessing consequence categories and hydraulic performance of structures (ESR/2016/1933).
J5	Construction of a regulated structure is prohibited unless: (a) the holder has submitted a consequence category assessment report and certification to the administering authority; and (b) certification for the design, design plan (regulated structure) and the associated operating procedures has been certified by a suitably qualified and experienced person in compliance with the relevant condition of this authority.
J6	Certification must be provided by the suitably qualified and experienced person who oversees the preparation of the design plan (regulated structure) in the form set out in the Manual for assessing consequence categories and hydraulic performance of structures (ESR/2016/1933), and must be recorded in the Register of Regulated Structures.

J7	Regulated structures must: (a) be designed and constructed in compliance with the Manual for assessing consequence categories and hydraulic performance of structures (ESR/2016/1933); (b) be designed and constructed with due consideration given to ensuring that the design integrity would not be compromised on account of: (i) floodwaters from entering the regulated dam from any watercourse or drainage line; and (ii) wall failure due to erosion by floodwaters arising from any watercourse or drainage line. (c) have the floor and sides of the dam designed and constructed to prevent or minimise the passage of the wetting front and any entrained contaminants through either the floor or sides of the dam during the operational life of the dam and for any period of decommissioning and rehabilitation of the dam.
J8	Certification by the suitably qualified and experienced person who supervises the construction must be submitted to the administering authority on the completion of construction of the regulated structure, and state that: (a) the 'as constructed' drawings and specifications meet the original intent of the design plan (regulated structure) for that regulated structure (b) construction of the regulated structure is in accordance with the design plan (regulated structure).
J9	**Notification of affected persons** All affected persons must be provided with a copy of the emergency action plan in place for each regulated structure (a) for existing structures that are regulated structures, within 10 business days of this condition taking effect; (b) prior to the operation of the new regulated structure; and (c) if the emergency action plan is amended, within 5 business days of it being amended.

J10	**Operation of a regulated structure** Operation of a regulated structure, except for an existing structure, is prohibited unless the holder has submitted to the administering authority in respect of regulated structure, all of the following: (a) one paper copy and one electronic copy of the design plan (regulated structure) and certification of the 'design plan (regulated structure)' in accordance with condition J5; (b) a set of 'as constructed' drawings and specifications; (c) certification of the 'as constructed drawings and specifications' in accordance with condition J8; (d) where the regulated structure is to be managed as part of an integrated containment system for the purpose of sharing the DSA volume across the system, a copy of the certified system design plan (regulated structure); (e) the requirements of this authority relating to the construction of the regulated structure have been met; (f) the holder has entered the details required under this authority, into a Register of Regulated Structures; and (g) there is a current operational plan for the regulated structure.
J11	Each regulated structure must be maintained and operated, for the duration of its operational life until decommissioned and rehabilitated, in compliance with the current operational plan and, if applicable, the current design plan (regulated structure) and associated certified 'as constructed' drawings.
J12	**Mandatory reporting level** Conditions J13 to J16 inclusive only apply to Regulated Structures which have not been certified as low consequence category for 'failure to contain – overtopping'.
J13	The Mandatory Reporting Level (the MRL) must be marked on a regulated dam in such a way that during routine inspections of that dam, it is clearly observable.
J14	The holder must, as soon as practicable but within forty-eight (48) hours of becoming aware, notify the administering authority when the level of the contents of a regulated dam reaches the MRL.
J15	The holder must, immediately on becoming aware that the MRL has been reached, act to prevent the occurrence of any unauthorised discharge from the regulated dam.
J16	The holder must record any changes to the MRL in the Register of Regulated Structures.
J17	**Design storage allowance** The holder must assess the performance of each regulated dam or linked containment system over the preceding November to May period based on actual observations of the available storage in each regulated dam or linked containment system taken prior to 1 July of each year.

J18	By 1 November of each year, storage capacity must be available in each regulated dam (or network of linked containment systems with a shared DSA volume), to meet the Design Storage Allowance (DSA) volume for the dam (or network of linked containment systems).
J19	The holder must, as soon as practicable but within forty-eight (48) hours of becoming aware that the regulated dam (or network of linked containment systems) will not have the available storage to meet the DSA volume on 1 November of any year, notify the administering authority.
J20	The holder must, immediately on becoming aware that a regulated dam (or network of linked containment systems) will not have the available storage to meet the DSA volume on 1 November of any year, act to prevent the occurrence of any unauthorised discharge from the regulated dam or linked containment systems.
J21	**Annual inspection report** Each regulated structure must be inspected each calendar year by a suitably qualified and experienced person.
J22	At each annual inspection, the condition and adequacy of all components of the regulated structure must be assessed and a suitably qualified and experienced person must prepare an annual inspection report containing details of the assessment and include a recommendations section, with any recommended actions to ensure the integrity of the regulated structure or a positive statement that no recommendations are required.
J23	The suitably qualified and experienced person who prepared the annual inspection report must certify the report in accordance with the Manual for assessing consequence categories and hydraulic performance of structures (ESR/2016/1933).
J24	The holder must within 20 business days of receipt of the annual inspection report, provide to the administering authority: (a) The recommendations section of the annual inspection report; and (b) If applicable, any actions being taken in response to those recommendations; and (c) If, following receipt of the recommendations and (if applicable) recommended actions, the administering authority requests a copy of the annual inspection report from the holder, provide this to the administering authority within 10 business days of receipt of the request.
J25	**Transfer arrangements** The holder must provide a copy of any reports, documentation and certifications prepared under this authority, including but not limited to any Register of Regulated Structures, consequence assessment, design plan (regulated structure) and other supporting documentation, to a new holder on transfer of this authority.
J26	**Register of Regulated Structures** A Register of Regulated Structures must be established and maintained by the holder for each regulated structure:

J27	The holder must provisionally enter the required information in the Register of Regulated Structures when a design plan (regulated structure) for a regulated dam is submitted to the administering authority.
J28	The holder must make a final entry of the required information in the Register of Regulated Structures once compliance with condition J10 has been achieved.
J29	The holder must ensure that the information contained in the Register of Regulated Structures is current and complete on any given day.
J30	All entries in the Register of Regulated Structures must be approved by the chief executive officer for the holder of this authority, or their delegate, as being accurate and correct.
J31	The holder must, at the same time as providing the annual return, supply to the administering authority a copy of the records contained in the Register of Regulated Structures, in the electronic format required by the administering authority.

Schedule K – Figures

Figure 1 – Mine affected water release points

To be provided prior to commencement of release of mine affected water.

Figure 2 – Upstream and downstream monitoring points

To be provided prior to commencement of release of mine affected water.

Definitions

Key terms and/or phrases used in this document are defined in this section. EA holders should note that where a term is not defined, the definition in the *Environmental Protection Act 1994*, its regulations or environmental protection policies must be used. If a word remains undefined it has its ordinary meaning.

Administering Authority is the agency that administers the environmental authority provisions under the *Environmental Protection Act 1994*.

Affected person is someone whose drinking water can potentially be impacted as a result of discharges from a dam or their life can be put at risk due to dwellings or workplaces being in the path of a dam break flood.

Airblast overpressure means energy transmitted from the blast site within the atmosphere in the form of pressure waves. The maximum excess pressure in this wave, above ambient pressure is the peak airblast overpressure measured in decibels linear (dBL).

Annual inspection report means an assessment prepared by a suitably qualified and experienced person containing details of the assessment against the most recent consequence assessment report and design plan (regulated structure) (or system design plan):

(a) against recommendations contained in previous annual inspections reports;

(b) against recognised dam safety deficiency indicators;

(c) for changes in circumstances potentially leading to a change in consequence category;

(d) for conformance with the conditions of this authority;

(e) for conformance with the 'as constructed' drawings;

(f) for the adequacy of the available storage in each regulated dam, based on an actual observation or observations taken after 31 May each year but prior to 1 November of that year, of accumulated sediment, state of the containment barrier and the level of liquids in the **dam** (or network of linked containment systems); and

(g) for evidence of conformance with the current operational plan.

Annual exceedance probability or AEP the probability that at least one event in excess of a particular magnitude will occur in any given year.

Appropriately 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 on performance relating to the subject matter using the relevant protocols, standards, methods or literature.

Assessed or **assessment** by a suitably qualified and experienced person in relation to a consequence assessment of a dam, means that a statutory declaration has been made by that person and, when taken together with any attached or appended documents referenced in that declaration, all of the following aspects are addressed and are sufficient to allow an independent audit of the assessment:

(a) exactly what has been assessed and the precise nature of that determination;

(b) the relevant legislative, regulatory and technical criteria on which the assessment has been based;

(c) the relevant data and facts on which the assessment has been based, the source of that material, and the efforts made to obtain all relevant data and facts; and

(d) the reasoning on which the assessment has been based using the relevant data and facts, and the relevant criteria.

Associated works in relation to a dam, means:

(a) operations of any kind and all things constructed, erected or installed for that dam; and

(b) any land used for those operations.

Authority means an environmental authority or a development approval.

Background, with reference to the water schedule means the average of samples taken prior to the commencement of mining from the same waterway that the current sample has been taken.

Blasting means the use of explosive materials to fracture:

(a) rock, coal and other minerals for later recovery, or

(b) structural components or other items to facilitate removal from a site or for reuse.

Certification, Certifying or **Certified** by an suitably qualified and experienced person in relation to a design plan (regulated structure) or an annual report regarding dams/structures, means that a statutory declaration has been made by that person and, when taken together with any attached or appended documents referenced in that declaration, all of the following aspects are addressed and are sufficient to allow an independent audit at any time:

(a) exactly what is being certified and the precise nature of that certification;

(b) the relevant legislative, regulatory and technical criteria on which the certification has been based;

(c) the relevant data and facts on which the certification has been based, the source of that material, and the efforts made to obtain all relevant data and facts; and

(d) the reasoning on which the certification has been based using the relevant data and facts, and the relevant criteria.

Chemical means:

(a) an agricultural chemical product or veterinary chemical product within the meaning of the Agricultural and *Veterinary Chemicals Code Act 1994* (Commonwealth), or
(b) a dangerous good under the Australian Code for the Transport of Dangerous Goods by Road and Rail approved by the Australian Transport Council, or
(c) a lead hazardous substance within the meaning of the Workplace Health and Safety Regulation 1997, or
(d) a drug or poison in the Standard for the Uniform Scheduling of Drugs and Poisons prepared by the Australian Health Ministers' Advisory Council and published by the Commonwealth, or
(e) any substance used as, or intended for use as:
    (i) a pesticide, insecticide, fungicide, herbicide, rodenticide, nematocide, miticide, fumigant or related product, or
    (ii) a surface active agent, including, for example, soap or related detergent, or
    (iii) a paint solvent, pigment, dye, printing ink, industrial polish, adhesive, sealant, food additive, bleach, sanitiser, disinfectant, or biocide, or
    (iv) a fertiliser for agricultural, horticultural or garden use, or
    (v) a substance used for, or intended for use for mineral processing or treatment of metal, pulp and paper, textile, timber, water or wastewater, or
    (vi) manufacture of plastic or synthetic rubber.

Commercial place means a workplace used as an office or for business or commercial purposes, which is not part of the mining activity and does not include employees' accommodation or public roads.

Construction or **constructed** in relation to a regulated structure includes building a new regulated structure and lifting or otherwise modifying an existing regulated structure, but does not include investigations and testing necessary for the purpose of preparing a design plan (regulated structure).

Construction or constructed, in relation to watercourse diversions, is the process of building, or modifying an existing diversion, but does not include investigations and testing necessary for the purpose of preparing a design plan (diversion).

Construction or constructed in relation to a dam includes building a new dam and modifying or lifting an existing dam, but does not include investigations and testing necessary for the purpose of preparing a design plan (regulated structure).

Consequence in relation to a structure as defined, means the potential for environmental harm resulting from the collapse or failure of the structure to perform its primary purpose of containing, diverting or controlling flowable substances.

Consequence category means a category, either low, significant or high, into which a dam is assessed as a result of the application of tables and other criteria in the *Manual for Assessing Consequence Categories and Hydraulic Performance of Structures (ESR/2016/1933)* .

Dam means a land-based structure or a void that contains, diverts or controls flowable substances, and includes any substances that are thereby contained, diverted or controlled by that land-based structure or void and **associated works**.

Dam crest volume means the volume of material (liquids and/or solids) that could be within the walls of a dam at any time when the upper level of that material is at the crest level of that dam. That is, the instantaneous maximum volume within the walls, without regard to flows entering or leaving (for example, via spillway).

Design plan (diversion) is a document that contains the design, operation, monitoring and revegetation criteria of a watercourse diversion that addresses the outcomes stated in conditions on the environmental authority relating to the diversion. The document should include, but not be limited to:

(a) required information under a functional design;

(b) the location, function and description of geomorphic and riparian vegetation features within the proposed watercourse diversion;

(c) results from hydrologic, hydraulic and sediment transportation modelling used in the design of the diversion;

(d) a revegetation and vegetation management plan (a revegetation plan) for the diversion;

(e) engineering drawings depicting the physical attributes and dimensions of the diversion;

(f) (if relevant) the staged development of a permanent watercourse diversion including the proposed use of temporary watercourse diversions with identified lifespans;

(g) all investigation and other reports relied on by the design; and

(h) plans and specifications sufficient to complete construction and revegetation in accordance with the design.

Design plan (regulated structure) is a document setting out how all identified consequence scenarios are addressed in the planned design and operation of a regulated structure.

Design storage allowance or DSA means an available volume, estimated in accordance with the *Manual for Assessing Consequence Categories and Hydraulic Performance of Structures (ESR/2016/1933)* published by the administering authority, must be provided in a dam as at 1 November each year in order to prevent a discharge from that dam to an **annual exceedance probability** (AEP) specified in that Manual.

Designer for the purposes of a regulated dam, means the certifier of the design plan (regulated structure) for the regulated dam.

Development approval means a development approval under the *Integrated Planning Act 1997* or the *Planning Act 2016* in relation to a matter that involves an environmentally relevant activity under the *Environmental Protection Act 1994*.

Disturbance of land includes:

(a) compacting, removing, covering, exposing or stockpiling of earth
(b) removal or destruction of vegetation or topsoil or both to an extent where the land has been made susceptible to erosion
(c) carrying out mining within a watercourse, waterway, wetland or lake
(d) the submersion of areas by tailings or hazardous contaminant storage and dam/structure walls
(e) temporary infrastructure, including any infrastructure (roads, tracks, bridges, culverts, dam/structures, bores, buildings, fixed machinery, hardstand areas, airstrips, helipads etc) which is to be removed after the mining activity has ceased
(f) releasing of contaminants into the soil, or underlying geological strata.

However, the following areas are not included when calculating areas of 'disturbance':

(a) areas off lease (e.g. roads or tracks which provide access to the mining lease)
(b) areas previously disturbed which have achieved the rehabilitation outcomes
(c) by agreement with the administering authority, areas previously disturbed which have not achieved the rehabilitation objective(s) due to circumstances beyond the control of the mine operator (such as climatic conditions)
(d) areas under permanent infrastructure. Permanent infrastructure includes any infrastructure (roads, tracks, bridges, culverts, dam/structures, bores, buildings, fixed machinery, hardstand areas, airstrips, helipads etc) which is to be left by agreement with the landowner
(e) disturbance that pre-existed the grant of the tenure.

EC means electrical conductivity.

Effluent treated waste water released from sewage treatment plants.

Emergency action plan means documentation forming part of the operational plan held by the holder or a nominated responsible officer, that identifies emergency conditions that sets out procedures and actions that will be followed and taken by the dam owner and operating personnel in the event of an emergency. The actions are to minimise the risk and consequences of failure, and ensure timely warning to downstream communities and the implementation of protection measures. The plan must require dam owners to annually update contact.

Equilibrium: A state where 'balance' is achieved despite changing variables.

Existing structure means a structure that was in existence prior to the adoption of this schedule of conditions under the authority.

Extreme Storm Storage – means a storm storage allowance determined in accordance with the criteria in the *Manual for Assessing Consequence Categories and Hydraulic Performance of Structures (ESR/2016/1933)* published by the administering authority.

Flowable substance means matter or a mixture of materials which can flow under any conditions potentially affecting that substance. Constituents of a flowable substance can include water, other liquids fluids or solids, or a mixture that includes water and any other liquids fluids or solids either in solution or suspension.

Functional design is a document that contains 'conceptual' information about the design, operation and revegetation criteria of a watercourse diversion that addresses the outcomes stated in the conditions on the environmental authority relating to the diversion. The document should include, but not be limited to:

(a) geomorphic and vegetation assessment of the existing watercourse;

(b) hydrologic conditions of the existing watercourse;

(c) the proposed watercourse diversion route; and

(d) results from hydrologic, hydraulic and sediment transportation modelling used in the design of the diversion.

Holder means:

(a) where this document is an environmental authority, any person who is the holder of, or is acting under, that environmental authority; or

(b) where this document is a development approval, any person who is the registered operator for that development approval.

Hydraulic performance means the capacity of a regulated dam to contain or safely pass flowable substances based on the design criteria specified for the relevant consequence category in the *Manual for Assessing Consequence Categories and Hydraulic Performance of Structures (ESR/2016/1933)*.

Infrastructure means water storage dams, levees, roads and tracks, buildings and other structures built for the purpose of the mining activity.

Land in the 'land schedule' of this document means land excluding waters and the atmosphere, that is, the term has a different meaning from the term as defined in the *Environmental Protection Act 1994*. For the purposes of the *Acts Interpretation Act 1954,* it is expressly noted that the term 'land' in this environmental authority relates to physical land and not to interests in land.

Land use –means the selected post mining use of the land, which is planned to occur after the cessation of mining operations.

Leachate means a liquid that has passed through or emerged from, or is likely to have passed through or emerged from, a material stored, processed or disposed of at the operational land which contains soluble, suspended or miscible contaminants likely to have been derived from the said material.

Levee means an embankment that only provides for the containment and diversion of stormwater or flood flows from a contributing catchment, or containment and diversion of flowable materials resulting from releases from other works, during the progress of those stormwater or flood flows or those releases; and does not store any significant volume of **water** or **flowable substances** at any other times.

Licensed place means the mining activities carried out at the mining tenements the subject of this environmental authority.

Low consequence dam means any dam that is not a high or significant consequence category as assessed using the *Manual for Assessing Consequence Categories and Hydraulic Performance of Structures (ESR/2016/1933).*

'm' means metres.

Mandatory reporting level or MRL means a warning and reporting level determined in accordance with the criteria in the *Manual for Assessing Consequence Categories and Hydraulic Performance of Structures (ESR/2016/1933)* published by the administering authority.

Manual means the *Manual for Assessing Consequence Categories and Hydraulic Performance of Structures (ESR/2016/1933)*published by the administering authority.

Mine affected water:

(a) means the following types of water:

(i) pit water, tailings dam water, processing plant water

(ii) water contaminated by a mining activity which would have been an environmentally relevant activity under Schedule 2 of the Environmental Protection Regulation 2019 if it had not formed part of the mining activity

(iii) rainfall runoff which has been in contact with any areas disturbed by mining activities which have not yet been rehabilitated, excluding rainfall runoff discharging through release points associated with erosion and sediment control structures that have been installed in accordance with the standards and requirements of an Erosion and Sediment Control Plan to manage such runoff, provided that this water has not been mixed with pit water, tailings dam water, processing plant water or workshop water

(iv) groundwater which has been in contact with any areas disturbed by mining activities which have not yet been rehabilitated

(v) groundwater from the mine's dewatering activities

(vi) a mix of mine affected water (under any of paragraphs (i) – (v)) and other water.

(b) does not include surface water runoff which, to the extent that it has been in contact with areas disturbed by mining activities that have not yet been completely rehabilitated, has only been in contact with:

(i) land that has been rehabilitated to a stable landform and either capped or revegetated in accordance with the acceptance criteria set out in the environmental authority but only still awaiting maintenance and monitoring of the rehabilitation over a specified period of time to demonstrate rehabilitation success, or

(ii) land that has partially been rehabilitated and monitoring demonstrates the relevant part of the landform with which the water has been in contact does not cause environmental harm to waters or groundwater, for example:

(1) areas that are been capped and have monitoring data demonstrating hazardous material adequately contained with the site;

(2) evidence provided through monitoring that the relevant surface water would have met the water quality parameters for mine affected water release limits in this environmental authority, if those parameters had been applicable to the surface water runoff; or

(iii) both.

Mining activities means the activities**:**

(a) authorised as per the definition in section 110 of the *Environmental Protection Act 1994*; and

(b) all environmentally relevant activities authorised under this environmental authority.

Minimise is to reduce to the smallest possible amount or degree.

Modification or modifying (see definition of 'construction')

NATA means National Association of Testing Authorities, Australia.

Natural flow means the flow of water through waters caused by nature.

Non-polluting means having no adverse impacts upon the receiving environment.

Operational plan includes:

(a) normal operating procedures and rules (including clear documentation and definition of process inputs in the DSA allowance);

(b) contingency and emergency action plans including operating procedures designed to avoid and/or minimise environmental impacts including threats to human life resulting from any overtopping or loss of structural integrity of the regulated structure.

Peak particle velocity (ppv) means a measure of ground vibration magnitude which is the maximum rate of change of ground displacement with time, usually measured in millimetres/second (mm/s).

Permanent watercourse diversion is a man-made structure that incorporates the geomorphologic, hydraulic, hydrologic and ecological components of a local watercourse and is designed, constructed, operated and maintained according to an engineering standard that ultimately achieves a self-sustaining watercourse able to function without features or characteristics that rely on ongoing maintenance or that impose a financial or other burden on the proponent, government or the community.

Pre-existing watercourse is the section of watercourse from which the flow of water will be diverted as a result of the construction and operation of a watercourse diversion.

Protected area means –

(a) a protected area under the *Nature Conservation Act 1992*, or
(b) a marine park under the *Marine Parks Act 1992*, or
(c) a World Heritage Area.

Receiving environment in relation to an activity that causes or may cause environmental harm, means the part of the environment to which the harm is, or may be, caused. The receiving environment includes (but is not limited to):

(a) a watercourse;
(b) groundwater; and
(c) an area of land that is specified in this environmental authority.

Receiving waters means the waters into which this environmental authority authorises releases of mine affected water.

Register of Regulated Dams includes**:**

(a) Date of entry in the register;
(b) Name of the dam, its purpose and intended/actual contents;
(c) The consequence category of the dam as assessed using the *Manual for Assessing Consequence Categories and Hydraulic Performance of Structures (ESR/2016/1933)*;
(d) Dates, names, and reference for the design plan (regulated structure) plus dates, names, and reference numbers of all document(s) lodged as part of a design plan (regulated structure) for the dam;
(e) Name and qualifications of the suitably qualified and experienced person who certified the design plan (regulated structure) and 'as constructed' drawings;
(f) For the regulated dam, other than in relation to any levees –
    (i) The dimensions (metres) and surface area (hectares) of the dam measured at the footprint of the dam;
    (ii) Coordinates (latitude and longitude in GDA94) within five metres at any point from the outside of the dam including its storage area
    (iii) Dam crest volume (megalitres);
    (iv) Spillway crest level (metres AHD).

(v) Maximum operating level (metres AHD);
(vi) Storage rating table of stored volume versus level (metres AHD);
(vii) Design storage allowance (megalitres) and associated level of the dam (metres AHD);
(viii) Mandatory reporting level (metres AHD);

(g) The design plan (regulated structure) title and reference relevant to the dam;
(h) The date construction was certified as compliant with the design plan (regulated structure);
(i) The name and details of the suitably qualified and experienced person who certified that the constructed dam was compliant with the design plan (regulated structure);
(j) Details of the composition and construction of any liner;
(k) The system for the detection of any leakage through the floor and sides of the dam;
(l) Dates when the regulated dam underwent an annual inspection for structural and operational adequacy, and to ascertain the available storage volume for 1 November of any year;
(m) Dates when recommendations and actions arising from the annual inspection were provided to the administering authority; and
(n) Dam water quality as obtained from any monitoring required under this authority as at 1 November of each year.

Regulated dam means any dam in the significant or high consequence category as assessed using the *Manual for Assessing Consequence Categories and Hydraulic Performance of Structures (ESR/2016/1933)* published by the administering authority.

Rehabilitation is the process of reshaping and revegetating land to restore it to a stable landform.

Regulated structure means any structure in the significant or high consequence category as assessed using the Manual for assessing consequence categories and hydraulic performance of structures (ESR/2016/1933) published by the administering authority. A regulated structure does not include:

- a fabricated or manufactured tank or container, designed and constructed to an Australian Standard that deals with strength and structural integrity of that tank or container;
- a sump or earthen pit used to store residual drilling material and drilling fluid only for the duration of drilling and well completion activities;
- a flare pit.

Release event means a surface water discharge from mine affected water storages or contaminated areas on the licensed place.

Representative means a sample set which covers the variance in monitoring or other data either due to natural changes or operational phases of the mining activities.

Residual drilling material means waste drilling materials including muds and cuttings or cement returns from well holes and which have been left behind after the drilling fluids are pumped out.

Revegetation is the re-establishment of vegetation[1] of a species and density of cover similar to surrounding undisturbed areas or the landform that existed before mining activities on soil surfaces associated with the construction or rehabilitation of a watercourse diversion.

RL means reduced level, relative to mean sea level as distinct from depths to water.

Saline drainage the movement of waters, contaminated with salts, as a result of the mining activity.

[1]Not including a species declared under the Land Protection (Pest and Stock Route Management) Regulation 2003 as a category class 1 pest, category class 2 pest or category class 3 pest.

Self-sustaining means not requiring on-going intervention and maintenance to maintain functional riverine processes and characteristics.

Sensitive place means:

(a) a dwelling, residential allotment, mobile home or caravan park, residential marina or other residential premises;
(b) a motel, hotel or hostel;
(c) an educational institution;
(d) a medical centre or hospital;
(e) a protected area under the *Nature Conservation Act 1992*, the *Marine Parks Act 1992* or a World Heritage Area, or
(f) a public park or gardens.

Structure means dam or levee.

Spillway means a weir, channel, conduit, tunnel, gate or other structure designed to permit discharges form the dam, normally under flood conditions or in anticipation of flood conditions.

Suitably qualified and experienced person in relation to regulated structures means a person who is a Registered Professional Engineer of Queensland (RPEQ) under the provisions of the *Professional Engineers Act 2002*, who has an appropriate level of expertise in the structures, geomechanics, hydrology, hydraulics and environmental impact of watercourse diversions.

Demonstrated competency and relevant experience:

(a) for regulated dams, an RPEQ who is a civil engineer with the required qualifications in dam safety and dam design.

(b) for regulated levees, an RPEQ who is a civil engineer with the required qualifications in the design of flood protection embankments.

Note: It is permissible that a suitably qualified and experienced person obtain subsidiary certification from an RPEQ who has demonstrated competence and relevant experience in either geomechanics, hydraulic design or engineering hydrology.

An ***appropriate level of expertise*** includes:

- demonstrable competency, experience and expertise in:
    - investigation, design or construction of watercourses diversions
    - operation and maintenance of watercourse diversions
    - geomechanics with particular emphasis on channel equilibrium, geology and geochemistry
    - hydrology with particular reference to flooding, estimation of extreme storms, water management or meteorology
    - hydraulics with particular reference to sediment transport and deposition and erosion control
    - hydrogeology with particular reference to seepage and groundwater
    - solute transport processes and monitoring thereof, or
- sufficient knowledge and experience to certify that where the **suitably qualified and experienced person** has relied on advice and information provided by other **persons with relevant expertise***:
    - they consider it reasonable to rely on that advice and information
    - the expert providing the advice and information has knowledge, competency, suitable

experience and demonstrated expertise in the matters related to watercourse diversions.

Persons with relevant expertise include:

- Geomorphologist: person who has demonstrated competency and relevant experience in stream geomorphology and watercourse diversions.
- Geotechnical Expert: person who has demonstrated competency and relevant experience in geotechnical assessment of soil characteristics suitable for watercourse diversions.
- Vegetation Expert: person who has demonstrated competency and relevant experience in the identification, role and function of vegetation with watercourses and adjoining floodplains, and has demonstrated competency and relevant experience in revegetation of watercourse diversions and adjoining floodplains. .
- Groundwater Expert: person who has demonstrated competency and relevant experience in groundwater systems.
- Surface Water Expert: person who has demonstrated competency and relevant experience in hydrology.
- Engineer: person who is a Registered Professional Engineer of Queensland (RPEQ) under the provisions of the *Professional Persons Act 2002* or has similar qualifications under a respected professional registration association, and has demonstrated competency and relevant experience in design and construction of watercourse diversions.
- Soils Expert: person who has demonstrated competency and relevant experience in soil classification including the physical, chemical and hydrologic analysis of soil.

System design plan means a plan that manages an integrated containment system that shares the required DSA and/or ESS volume across the integrated containment system.

Temporary watercourse diversion is a man-made structure that may incorporate geomorphologic, hydraulic, hydrologic and ecological components of a local watercourse and is designed, constructed, operated and maintained to an engineering standard that ensures the diversion does not compromise the equilibrium and performance of the diversion and adjoining watercourses. A temporary diversion is replaced by a permanent diversion, or the re-establishment of the pre existing watercourse, within the timeframe specified in the design plan (diversion).

The Act means the *Environmental Protection Act 1994*.

µS/cm means micro siemens per centimetre.

Void means any constructed, open excavation in the ground.

Water is defined under Schedule 4 of the *Water Act 2000.*

Watercourse has the meaning in Schedule 4 of the *Environmental Protection Act 1994* and means a river, creek or stream in which water flows permanently or intermittently—

(a) in a natural channel, whether artificially improved or not; or

(b) in an artificial channel that has changed the course of the watercourse.

Watercourse includes the bed and banks and any other element of a river, creek or stream confining or containing water.

Water quality means the chemical, physical and biological condition of water.

Water year means the twelve (12) month period from 1 July to 30 June.

Waters includes all or any part of a river, stream, lake, lagoon, pond, swamp, wetland, unconfined surface water, unconfined water in natural or artificial watercourses, bed and banks of a watercourse, dams, non-tidal or tidal waters (including the sea), stormwater channel, stormwater drain, roadside gutter, stormwater run-off, and groundwater.

Wet season means the time of year, covering one or more months, when most of the average annual rainfall in a region occurs. For the purposes of DSA determination this time of year is deemed to extend from 1 November in one year to 31 May in the following year inclusive.

END OF PERMIT