

Notice

Environmental Protection Act 1994

Notice to conduct or commission an environmental investigation

This notice to conduct or commission an environmental investigation is issued by the administering authority pursuant to section 326B of the Environmental Protection Act 1994.

DGR Global Ltd ACN 052 354 837
Level 27, 111 Eagle Street
BRISBANE CITY QLD 4000

cc. Mr John Bierling
Group Operations Manager
DGR Global Ltd
Email: jbierling@dgrglobal.com.au

Your reference: EPML00928813

Our reference: C-CPLRC-100267427 (101/0008732) STAT-E-100654910

Thursday, 13 June 2024

Attention: Mr John Bierling, Group Operations Manager

Take notice: that under the *Environmental Protection Act 1994* (the Act) a notice to conduct or commission an environmental investigation is issued to DGR Global Ltd (you) by the administering authority. The administering authority is the Chief Executive of the Department of Environment, Science and Innovation (the department).

The notice to conduct or commission an environmental investigation is issued in respect of the activities of DGR Global Ltd at the Shamrock mine site on land described as mining lease (ML) ML50291, ML3749, ML3741, ML3678, ML3752 and ML3753, situated at Webb Road, BLACK SNAKE, QLD 4600 (the premises).

A. Grounds

The notice to conduct or commission an environmental investigation as described in Section B is issued on the following grounds:

1. Pursuant to section 326B(1)(b) of the Act the department is satisfied on reasonable grounds that— (b) an activity or proposed activity is causing, or is likely to cause, environmental harm.

The facts and circumstances forming the basis for these grounds are:

1. You are:
 - (a) the holder of mining leases ML50291, ML3749, ML3741, ML3678, ML3752 and ML3753;
 - (b) the holder of environmental authority EPML00928813 (the EA); and
 - (c) the person with legal ownership, possession and control over the premises.



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2. The EA authorises the environmentally relevant activity of resource activity, Schedule 3, 16: Mining gold ore at the premises, subject to conditions of the EA.
3. A **tailings storage facility** (TSF) is located on the premises.
4. In a report titled '*Shamrock Mine 2022 Annual Inspection of Regulated Structures – TSF 113337.13 November 2022*' (ATC Williams Pty Ltd, 2022) prepared for you as a requirement of the EA condition F2-7, it was reported that the TSF is a dam:
 - (a) storing hazardous material (tailings solids and process liquor);
 - (b) containing approximately 770,000 tonnes of tailings material; and
 - (c) having a seepage collection system that forms part of the facility. This includes sand toe drains, a chimney drain against the existing dam and drains connected to a manifold which pipe seepage through a culvert to a Seepage Dam.
5. The Seepage Dam is lined and seepage collected within the Seepage Dam is returned to the TSF via pumps and pipes. The Seepage Dam forms part of the TSF and is intended to be operated as a no release structure.
6. 'Seepage Top Dam – South' and 'Seepage Top Dam – North' are unlined earthen dams located on the premises on either side of the Seepage Dam and designed to collect uncontaminated rainwater from the TSF embankment wall via surface drains positioned at the toe.
7. Section 14 of the Act provides a definition of environmental harm:

'(1) Environmental harm is any adverse effect, or potential adverse effect (whether temporary or permanent and of whatever magnitude, duration or frequency) on an environmental value, and includes environmental nuisance.

(2) Environmental harm may be caused by an activity— (a) whether the harm is a direct or indirect result of the activity; or (b) whether the harm results from the activity alone or from the combined effects of the activity and other activities or factors.'
8. Condition C1-1 of the EA prescribes '*contaminants must not be release (sic) from the site to any waters of (sic) the bed and banks of any waters.*' On 1 June 2022, AusRocks Pty Ltd (Ausrocks Resource Consultants, ARC), your third-party consultant, provided an email notification to the department reporting that you had '*become aware of a release of contaminated water from the D'Aguilar Mining Project (the premises) to waters at sampling point S4*'. This email identifies that you became aware of this release when ARC was reviewing water quality analysis results from biannual monitoring undertaken on 4 May 2022.
9. On 18 April 2023, the department issued environmental protection order (EPO) STAT-E-100336413 (the varied EPO) to you with respect to activities carried out at the premises. The varied EPO stated that it was issued to secure compliance with the general environmental duty (section 319 of the Act) and condition C1-1 of the EA in accordance with section 358(d) of the Act.
10. On 17 May 2023, you filed an appeal against the varied EPO decision: *DGR Global Limited ACN 052 354 837 v Chief Executive Administering the Environmental Protection Act 1994*, Planning & Environment Court Appeal No. 1363/2023 (the appeal).
11. The department has obtained independent expert opinion which indicates to the department:

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- (a) long-term chemistry similarities demonstrate a steady seepage from the TSF to the shallow groundwater system sufficient to warrant further investigations to characterise and understand seepage;
- (b) there are several data gaps in the groundwater monitoring and analysis records which limit the ability to fully interpret and analyse hydrogeological data; and
- (c) further hydrogeological investigations are required to be undertaken in respect of the groundwater upgradient, at and downgradient from the TSF.

12. Based on the above facts and circumstances, the department is satisfied on reasonable grounds that pursuant to section 326B(1)(b) of the Act, an activity being undertaken at the premises is causing, or is likely to cause environmental harm. The department also considers that it is reasonable to require you to conduct or commission an environmental investigation and prepare the reports at the times stated in the requirements in Section B under section 326B of the Act (this environmental investigation notice) including requirements that are supported by the hydrogeology, hydrochemistry and groundwater expert referred to in paragraph 11 above and that will provide the detail, clarity and structure of the hydrogeological investigations required.

B. Requirements

The environmental investigation must address the following matters: (definitions in **bold** are provided in section 6 - definitions):

Section 1 - General

1. By **8 August 2024** you must:
 - (a) engage an **appropriately qualified person/s** (AQP) to undertake the requirements specified below to be undertaken by an AQP;
 - (b) provide evidence of qualifications and experience of the AQP to the department; and
 - (c) commission the AQP to undertake the requirements specified below to be undertaken by an AQP.
2. You must submit all reports and documents required by this notice to the department via email to sunshinecoast.esr@des.qld.gov.au.

Section 2 – Hydrogeological conceptual model and gap analysis

3. As soon as reasonably practicable (and within a period no longer than 3 months starting after the completion of Requirement 1), you must provide to the department a preliminary hydrogeological conceptual model for the premises prepared by an AQP with experience and qualifications in hydrogeology, groundwater and hydrochemistry using the latest version of the department's guideline '*Using Monitoring Data to Assess Groundwater Quality and Potential Environmental Impacts*' (State of Queensland, 2021). The hydrogeological conceptual model must specifically address the hydrogeological information described in chapters 3 and 4 of that guideline.
4. The hydrogeological conceptual model required under Requirement 3 must address, as a minimum, the following matters, as relevant to the **tailings storage facility** (TSF) and the premises, based on all information available at the time:

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- (a) describe the geology of the premises, in terms of maps and cross-sections, including a description of aquifers and aquitards and how they function in terms of recharge and discharge;
 - (b) identify which aquifers are hydraulically connected to the TSF;
 - (c) describe groundwater levels (in mAHD) and groundwater flow directions using field measurements of groundwater levels taken from surveyed bores (i.e. groundwater levels are referenced to ground surface elevation of the bore in mAHD);
 - (d) describe connectivity and pathways between surface water and groundwater, including interactions between GM1, S4 and the new monitoring point (site LT S4 DS, located downstream of the S4 tributary) (with reference to elevations in Requirements 4(c) and 4(e));
 - (e) identify surveyed surface water monitoring points (S1, S4 and site LT S4 DS) and specify their elevation in mAHD (specifying the elevation of the common assumed vertical datum);
 - (f) describe how seasonality impacts the groundwater system in terms of groundwater levels, groundwater quality and groundwater flow directions;
 - (g) be supported by field data (including, but not limited to, groundwater bore logs describing the aquifer geology, spatial and temporal groundwater level data, historic and current (2024/2025) surface water and groundwater monitoring data, aquifer and aquitard hydraulic testing, site topography, rainfall data and TSF water level data); and
 - (h) confirm how the groundwater system functions upgradient, at, and downgradient from the TSF and describe the potential for the TSF to drive seepage into the shallow groundwater system.
5. At the same time as providing the model required by Requirement 3, you must provide to the department for comment a gap analysis report and any associated recommendations prepared by the AQP engaged in Requirement 3 to identify any data gaps that need to be addressed to complete the requirements of this investigation (e.g. the hydrogeological conceptual model, the water monitoring program (section 4) and the investigation report (section 5)). The gap analysis must include, but is not limited to:
- (a) an assessment as to whether additional groundwater bores need to be established upgradient (background), at, and downgradient of the TSF, and, if relevant, the locations (GPS coordinates) and depths of those bores on a drill plan;
 - (b) an assessment as to whether existing groundwater bores (additional to GM1) on the premises require decommissioning and replacement to function as intended, and, if relevant, the locations (GPS coordinates) and depths of those replacement bores on a drill plan; and
 - (c) an assessment of whether there are an adequate number of downgradient bores to accurately map the presence and extent of any groundwater contamination plume.
6. Within 3 months, or a reasonable extended period as agreed to with the department in writing (such agreement not to be unreasonably withheld) in the event of unavoidable weather delays, of the receipt of any comments provided by the department in respect of the gap analysis report under Requirement 5 (which must be provided by the department within 1 month of receiving the gap analysis pursuant to Requirement 5), you must expeditiously, subject to any comments from the department, which comments may include indicating any of the following is no longer required, procure a licensed groundwater bore driller to:

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- (a) drill, install and develop any additional bores as recommended by the AQP in Requirement 5 under the field supervision of an AQP, with preparation of hydrogeological bore logs for each new bore;
- (b) decommission and replace GM1 and any other existing monitoring bores that do not meet the Minimum Construction Requirements for Water Bores in Australia, 4th Edition (NUDLC, 2020) as recommended by the AQP, to function as intended to meet the requirements of this investigation notice; and
- (c) all bores must be installed or decommissioned in accordance with the Minimum Construction Requirements for Water Bores in Australia, 4th Edition (NUDLC, 2020) and the Groundwater Sampling and Analysis – A Field Guide, Geoscience Australia Record 2009/27.

Section 3 – Visual inspections and Expression events

- 7. You must ensure that the areas listed in Section 3 are sufficiently visible for the purposes of the visual inspection.
- 8. From **13 June 2024 until 12 June 2025**, you must undertake visual inspections of:
 - (a) the presence or otherwise of water expression at the TSF embankment and the western TSF embankment toe area on a weekly basis; and
 - (b) water level (mRL) of the TSF on a monthly basis.

You must make and keep records of the date and findings of these inspections and provide these records to the department upon request.

The same visual inspections as outlined in Requirements 8(a) and 8(b) must also be undertaken within 24 hours when more than 30mm of rain has been received in the last 24 hours (from 9am) on site.

- 9. In the event of any water expressing from any part of the TSF embankment or western TSF embankment toe area or surface water visibly releasing from the Seepage Top Dams to '**waters**' during the period for Requirement 8, you must complete the following:
 - (a) notify the department in writing with the details of the expression or visible release event (e.g. location, estimated volume, approximate duration, control measures) within 24 hours of becoming aware of the expression or visible release and weekly thereafter until the expression or visible release event ceases; and
 - (b) undertake insitu water quality monitoring (pH, electrical conductivity, dissolved oxygen and temperature) of water expressing from the TSF embankment and/or western TSF embankment toe area immediately and weekly thereafter until the expression event ceases. These results are to be recorded together with the GPS reference points (GDA 2020) of sampling locations and provided to the department within 24 hours; and
 - (c) record the rainfall received on the premises daily until the expression or visible release event ceases; and
 - (d) undertake water quality monitoring within 3 working days of becoming aware of the expression or visible release, at the surface water monitoring points prescribed in Table 1; and

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- (e) undertake water quality monitoring within 1 week of becoming aware of the expression or visible release, at the groundwater monitoring points prescribed in Table 1 (as have been constructed at the relevant time); and
- (f) as soon as possible but at least within 12 hours of becoming aware of the expression, ensure that the system for returning collected water from Seepage Top Dam North and Seepage Top Dam South to the Seepage Dam is operational and continue to do so until such time as:
 - i. inflows to these dams cease; or
 - ii. the monitoring required by Requirements 9(d) and (e) above demonstrate that the water does not contain **contaminants** above *Australian and New Zealand Guidelines for Fresh and Marine Water Quality*, 2018 95% AEL limits or, when developed, the interim site-specific surface water guideline values (as per Requirement 10).

Requirement 9 does not apply in respect of water expressing if Seepage Top Dam South is lined with a geomembrane liner that:

- consists of a thin plastic film, minimum 2 millimetres thick, manufactured from high density polyethylene or other material demonstrated to offer equivalent performance, strength and durability;
- be strong enough to ensure adequate tear resistance, puncture resistance and resistance to installation damage;
- be able to resist degradation caused by factors such as chemical attack, temperature, oxidation and stress cracking.

For clarity, the requirements in Requirement 9 apply with respect to visible surface water releases from Seepage Top Dams regardless of whether Seepage Top Dam South is lined or unlined.

Section 4 - Water Monitoring Program

10. By **19 September 2024** you must ensure that an AQP experienced in surface water quality assessment, engaged in accordance with Requirement 1, develops and provides to the department interim site-specific surface water guideline values using:
 - (a) background site data in accordance with the Guideline *Deciding aquatic ecosystem indicators and local water quality guideline values* (DES 2022) and Section 4.3 of the *Queensland Water Quality Guidelines* (DEHP 2009);
 - (b) *Environmental Protection (Water) Policy 2009 Water Quality Objectives* (refer Schedule 1 - Plan: WQ1381 Mary River environmental values and water quality objectives Basin No. 138, including all tributaries of the Mary River); and

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- (c) relevant guidelines (*Queensland Water Quality Guidelines*, 2009¹ and *Australian and New Zealand Guidelines for Fresh and Marine Water Quality*, 2018²),

including the reasoning for the same.

11. Commencing at the same time as Requirement 13 and concluding at the same time as Requirement 13, you must ensure an AQP undertakes:

- (a) surface water quality monitoring for the parameters in Table 1 at the locations and frequency specified in Table A:

Table A – Surface water monitoring sites and frequency

	Sites	Frequency
Additional surface water monitoring sites	LT S4 DS LT S4 US CC1 CC2 <i>(If there is no flow at LT S4 DS or LT S4 US, samples can be taken of any available water as close as possible to those points)</i> <i>(If there is no flow at one or more of CC1 or CC2, or if it is unsafe to cross Freshwater Dam spillway to access CC1 or CC2, then one or more of the alternative sites CC3, BS0 and/or BSA must be sampled as a replacement to ensure two total samples are taken)</i> Plan of above site locations is provided in Schedule 1	At least bi-monthly (total of 8 samples) Plus Following “significant rainfall” (total of 4 samples) (as contemplated by Requirement 12)
Existing surface water monitoring sites	S1 S4 S6 Plan provided at Figure 1, environmental authority EPML00928813	Quarterly (total of 4 samples for S1, S4 and S6) Plus Following “significant rainfall” (total of 4 samples) (as contemplated by Requirement 12)

- (b) measurement of flow rate (L/sec) at monitoring points in Table A (along with a corresponding photograph of flow conditions taken at the time of sampling);
- (c) analysis of surface water samples for the parameters prescribed in Table 1;

¹ Department of Environment and Heritage Protection (2009) *Queensland Water Quality Guidelines*, Version 3, ISBN 978-0-9806986-0-2.

² ANZG 2018. *Australian and New Zealand Guidelines for Fresh and Marine Water Quality*. Australian and New Zealand Governments and Australian state and territory governments, Canberra ACT, Australia. Available at www.waterquality.gov.au/anz-guidelines.

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- (d) for quality control purposes each surface water monitoring event must include one (1) complete set of blind field duplicate samples, labelled 'X'; and one (1) complete set of blind field blank samples using water supplied by the testing laboratory, labelled 'XX'; and
 - (e) the laboratory COC for each sampling event is to include a copy of email reports to be provided to the department to sunshinecoast.esr@des.qld.gov.au.
12. In addition to the sampling under Requirements 11 and 13, commencing at the same time as Requirement 13 and concluding at the same time as Requirement 13, you must ensure an AQP undertakes:
- (a) 4 rounds of separate "significant rainfall" surface water quality monitoring; and
 - (b) at the same times as the sampling undertaken in Requirement 12(a), 4 rounds of separate "significant rainfall" groundwater quality monitoring, for the parameters listed in Table 1 at the locations listed in Table 1. Requirements 11(d) and (e) and Requirements 14(f) and (g) apply to these samples, as relevant.
- "Significant rainfall" is defined as 30mm of rain at the site over a 48 hour period.
13. Commencing within 3 months after the completion of Requirement 6 and ending 12 months after commencement of this Requirement 13 you must commission and arrange for:
- (a) an AQP to sample background measurements for the parameters prescribed in Table 1, at groundwater monitoring bores identified in Table 1 that are positioned hydraulically upgradient to the TSF on a bi-monthly basis;
 - (b) the samples referred to in Requirement 13(a) above must span over a 12-month period to account for seasonal variability, in accordance with Section 4.2 of the department's guideline 'Using Monitoring Data to Assess Groundwater Quality and Potential Environmental Impacts' (State of Queensland, 2021) (or the equivalent section in the latest version of this guideline) (the Guideline);
 - (c) an AQP with experience and qualifications in hydrogeology, groundwater and hydrochemistry to derive site specific guidelines for groundwater quality using the background measurements outlined at Requirements 12(b) and 13(a) and described further at Requirement 13(b) above, and adopting the method set out in Section 4.2 and Chapter 5 of the Guideline; and
 - (d) bi-monthly monitoring of groundwater bores at and downgradient of the premises for a period of 12 months for the parameters listed in Table 1.
14. The groundwater monitoring required by Requirement 13 must include:
- (a) undertaking sampling in the first week of the relevant month (i.e. on any date between the 1st and 7th day of the month);
 - (b) installing non-vented pressure transducer data loggers (that monitor pressure and temperature) at each groundwater monitoring bore (and the inclusion of one barometric logger for barometric correction) prescribed in Table 1 and any further groundwater monitoring bores installed under Requirement 6. The loggers must be set to record groundwater pressure at every 15 minutes;
 - (c) bi-monthly manual measurements of groundwater standing water level (SWL) at each surveyed groundwater monitoring bore prescribed in Table 1 and any further groundwater monitoring bores installed under Requirement 6. The manual SWL must be measured using an electronic water level dipper;

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- (d) the pressure transducer data loggers and barometric logger referred to in 14(b) above must be downloaded every quarter. The manual SWL measurements and the pressure transducer groundwater levels must be plotted on individual hydrographs on a quarterly basis to ensure agreement between the manual and automatic measurements and identify any erroneous data logger issues. If any erroneous data logger issues are identified in the quarterly reviews, then these loggers must be replaced before the next monthly manual SWL measurement is taken;
- (e) analysis of groundwater samples for the parameters prescribed in Table 1;
- (f) for quality control purposes each bi-monthly groundwater monitoring event must include one (1) complete set of blind field duplicate samples, labelled 'X'; and one (1) complete set of blind field blank samples using water supplied by the testing laboratory, labelled 'XX'; and
- (g) the laboratory COC for each sampling event is to include a copy of email reports to be provided to the department to sunshinecoast.esr@des.qld.gov.au.

Table 1 – Surface water and ground water monitoring points and parameters

Parameter	Units	Monitoring Points – Surface Water	Monitoring Points – Ground Water
pH	pH units	S1 – location as per EA monitoring	GM1 – groundwater - location as per EA monitoring Any additional groundwater bores installed at the premises under Requirement 6 'X' (blind field duplicate) 'XX' (blind field blank)
Electrical Conductivity	µS/cm	S4 – location as per EA monitoring	
Total Dissolved Solids	mg/L	S6 – location as per EA monitoring	
Major cations (Ca, Mg, Na, K)	mg/L	tailings storage facility (S16) – location as per EA monitoring	
Major anions (Cl SO ₄ , Alkalinity) and Fluoride	mg/L	seepage dam (S3) – location as per EA monitoring	
Cyanide (Total and Weak Acid Dissociable)	mg/L	seepage top dam (N)	
		seepage top dam (S)	
Ultra-trace ORC Metals Suite (Sb, As, Be, B, Cd, Cr, Co, Cu, Pb, Mn, Mo, Ni, Se, Ag, Sn, Zn) – dissolved metals (field filtered)	µg/L	Water expression locations identified in Requirement 9 (only sampled in the circumstances set out at Requirement 9)	
Aluminium – dissolved (field filtered)	µg/L	Additional surface water monitoring sites set out in Table A	
Ultra-trace ORC Metals Suite (Sb, As, Be, B, Cd, Cr, Co, Cu, Pb, Mn, Mo, Ni, Se, Ag, Sn, Zn) – total metals	µg/L	'X' (blind field duplicate)	
		'XX' (blind field blank)	
Aluminium – total metals	µg/L		

15. All surface water samples, groundwater samples and other samples required under this investigation notice must be:

- (a) collected by an AQP with experience and qualifications in water quality monitoring and analysis and, transported to a laboratory under appropriate chain of custody protocols;
- (b) analysed by a laboratory which holds National Association of Testing Authorities (NATA) accreditation for the analysis performed. All sample container(s), sample preservation and holding

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times are to be in accordance with laboratory requirements for the analysis performed, as demonstrated on the associated laboratory sample receipt notification (SRN); and

- (c) provided to the department on request, in the format requested by the department (e.g. the WaTERS database).

- 16. All determinations of the quality of contaminants in waters, including quality control sampling, must be made in accordance with methods prescribed in the latest edition of the 'Monitoring and Sampling Manual *Environmental Protection (Water) Policy 2009*' (Department of Environment and Science, 2018) and carried out on samples that are representative.

Section 5 – Investigation report

- 17. Within 8 weeks of completing the Water Monitoring Program under Section 4, you must commission an AQP with experience and qualifications in hydrogeology, groundwater and hydrochemistry (and where required, an AQP with experience in surface water quality), to complete a report (the Environmental Report) that includes the following:
 - (a) using the surface water quality results of the Water Monitoring Program and the matters identified in Requirement 10(a) to (c), update the interim site-specific surface water guideline values developed pursuant to Requirement 10 to derive final site-specific surface water guideline values, including reasoning for the same;
 - (b) a review of the surface water quality results against the final site-specific surface water guideline values prepared in accordance with Requirement 17(a);
 - (c) a review of the groundwater quality results against relevant site specific guidelines for groundwater quality (refer to Requirement 13(c));
 - (d) tabular and graphical representation and analysis of trends in available monitoring data;
 - (e) field records and measurements, including the groundwater standing water level (SWL) and Black Snake Creek flow rates. Groundwater levels must be presented on individual hydrograph plots for each bore and show both manual and pressure transducer data;
 - (f) consideration and review of all observations, measurements and sampling undertaken in Section 3 - visual inspections and expression events;
 - (g) a groundwater flow diagram showing equipotential contours;
 - (h) a final updated hydrogeological conceptual model prepared in accordance with Requirements 3 and 4 which incorporates the findings of any drilling program, (including updates to aquifer extents and thicknesses), field testing and groundwater quality sampling under the Water Monitoring Program, seasonal groundwater level measurements compared with daily rainfall and TSF water levels (mRL);
 - (i) an assessment of the source, pathway and receiving environment of any identified contamination with reference to the outcome of any visual inspection and expression events (Section 3), the monitoring data obtained from the Water Monitoring Program (Section 4) and the final updated hydrogeological conceptual model required under Requirement 17(h) above;
 - (j) a desktop analysis of the extent of any groundwater contamination plume occurring on the premises or migrating from the premises, using the data collected during the Water Monitoring Program. The

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final updated hydrogeological conceptual model established under Requirement 17(h) above must be used as reference for describing the extent of any identified contamination plume;

- (k) details of remedial options available to;
- i. prevent the further release of contaminants from any identified source;
 - ii. address any identified contamination in surface and/or groundwater;
- (l) an assessment of each of the remedial options identified in Requirement 17(k) above including;
- i. the expected performance of each remedial option in preventing further releases of contaminants to surface water and groundwater; and
 - ii. an estimated option implementation timeframe, which considers project staging (where appropriate) to minimise the release of contaminants over time; and
 - iii. the likely cost of implementing the remedial option(s); and
 - iv. detail any assumptions applied and any site-specific limitations and/or considerations that would prevent or materially impact the implementation of any particular remedial option.
- (m) the selection of recommended sustainable, long-term remedial options which if implemented will, to the extent practicable, prevent the release of contaminants to surface water and groundwater from identified contaminant sources and remove contaminants from affected waters;
- (n) where completion of the recommended remedial options is not reasonably achievable within 6 months of the report submission, the report must also assess and, where appropriate, recommend interim controls to limit the release of contaminants to surface water and groundwater; and
- (o) details of any further investigations or works required to address any remaining data gaps.
18. Within two weeks of the report required under Requirement 17 being completed, you must submit a copy of this report to the department.

Take notice:

1. The requirements of this notice to conduct or commission an environmental investigation take effect immediately upon service of this notice.
2. This notice remains in force until further notice from the department.
3. You are responsible for meeting the costs of conducting or commissioning the environmental investigation, preparing the report, and providing any further information as requested by the department.

Environmental Report submission requirements

- As the **recipient** of this notice, you are required to provide a declaration to accompany the Environmental Report (Section 5 – Investigation report) submitted to the department.

The recipient declaration template and the information required to complete the declaration is available at [Compliance guidelines | Environment | Department of Environment and Science, Queensland \(des.qld.gov.au\)](https://www.des.qld.gov.au/Compliance-guidelines/Environment/Department-of-Environment-and-Science-Queensland)

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Section 6 - Definitions

‘Appropriately qualified person’ (AQP) is defined as a person who has professional qualifications, training, skills and 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.

‘Contaminant’ is defined in section 11 of the *Environmental Protection Act 1994*. A contaminant can be — (a) a gas, liquid or solid; or (b) an odour; or (c) an organism (whether alive or dead), including a virus; or (d) energy, including noise, heat, radioactivity and electromagnetic radiation; or (e) a combination of contaminants.

‘Tailings storage facility’ (TSF) is defined as the DGR Global Ltd Shamrock mine site tailing storage facility and associated seepage dam; a dam containing hazardous waste in environmental authority EPML00928813.

‘Waters’ includes river, stream, lake, lagoon, pond, swamp, wetland, unconfined surface water, unconfined water in natural or artificial watercourses, bed and bank of any waters, dams, non-tidal or tidal waters (including the sea), stormwater channel, stormwater drain, roadside gutter, stormwater runoff, and groundwater or any part thereof.

C. Reviews and appeals

The provisions regarding reviews of decisions and appeals are found in sections 519 to 539 of the Act.

A person who is dissatisfied with an original decision made by the Department of Environment, Science and Innovation (the department) may apply to have that decision internally reviewed. Information about initiating an appeal in relation to this notice is contained within the Internal Reviews and Appeals Information Sheet (available at www.qld.gov.au using the publication number ESR/2015/1742 as a search term). A request for review or appeal is to be made using the approved form ‘Application for review of original decision’ (available at www.qld.gov.au using the publication number ESR/2015/1573 as a search term).

Applications for reviews must be commenced within 10 business days after the day on which the person receives notice of the original decision or the department is taken to have made the decision or such longer period the department in special circumstances allows.

Applications for reviews are to be sent to Permit and Licence Management, Department of Environment, Science and Innovation: via email at palm@des.qld.gov.au, or by mail to the following address: GPO. Box 2454, Brisbane, QLD, 4001.

Applications for reviews must be accompanied by enough information to allow the department to decide the application.

Where an application has been made for a decision to be reviewed, the applicant may also apply to the relevant court for a stay of the decision to secure the effectiveness of the review.

Once the original decision has been reviewed, a person who is dissatisfied with the review decision may be able to appeal against that decision to the relevant court within 22 business days after receiving notice of the review decision.

A person whose interests are or would be adversely affected by a decision of the department may be able to request a statement of reasons for a decision or a statutory order review under the Judicial Review Act 1991.

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You may have other legal rights or obligations and should seek your own legal advice.

The department notes that you have agreed not to exercise your rights to seek an internal review or appeal in respect of the decision to issue this investigation notice. It is noted that this position does not apply to any steps that might occur after this investigation notice is issued, for instance in relation to any decision made by the department in respect of the environmental report.

D. Public Register

Pursuant to section 540 of the EP Act, the department is required to maintain a register of certain documents and information authorised under the EP Act. A copy of this document will be kept on the public register. The register is available for inspection by members of the public who are able take extracts, or copies of the documents from the register. Documents that are required to be kept on the register are published in their entirety, unless alteration is required by the EP Act. There is no general discretion allowing the department to withhold documents or information required to be kept on the public register. For more information on the department's public register, search 'public register' at www.qld.gov.au. For queries about privacy matters please email privacy@des.qld.gov.au or telephone 13 74 68.

E. Penalty

It is important that you know the impact to you personally as an individual or as a corporation for not meeting your obligations.

Under section 326D of the Act, failure to comply with a notice to conduct or commission an environmental investigation is an offence.

- The maximum penalty for failing to comply with a notice to conduct or commission an environmental investigation is 300 penalty units, totalling \$ 46,440 for an individual or \$232,200 for a corporation.

Section 3 of the *Penalties and Sentences Regulation 2015* prescribes the monetary value of a penalty unit.

Notice to conduct or commission an environmental investigation

Should you have any queries in relation to this notice, please contact Jacinta Thrower of the department on telephone number 07 5459 6141.



Signature

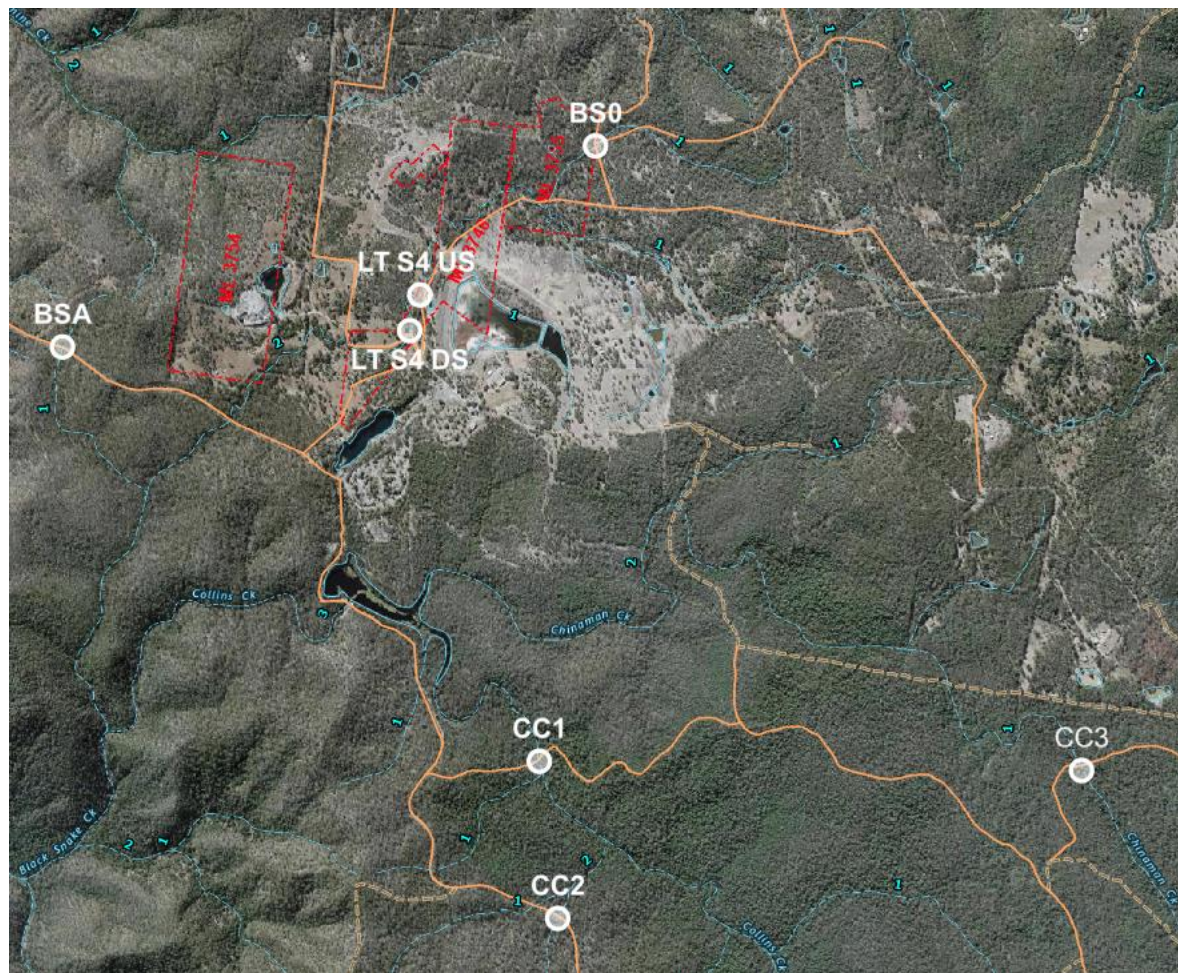
13/06/2024

Date

Ben Grant
Compliance Delivery Manager
Department of Environment, Science and
Innovation
Delegate of the Chief Executive
Environmental Protection Act 1994

Enquiries:
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Schedule 1 – Additional upstream, comparative surface water monitoring sites



Inset: LT S4 sites