

Environmental Protection Act 1994

Environmental Protection Order

This environmental protection order is issued by the administering authority pursuant to section 358 and Chapter 7, Part 5, Division 2 of the Environmental Protection Act 1994.

Peabody Coppabella Pty Ltd (ACN 095 976 042)
Level 5 100 Melbourne Street
South Brisbane QLD 4101

Your reference: EPML00579213

Our reference: STAT-E-100233727, STAT-E-100313944, C-CPLPO-100233720, C-CPLPO-100313942

14/12/2022

Dear Directors

Take notice: that under the *Environmental Protection Act 1994* (the Act) this environmental protection order (EPO) is issued to Peabody Coppabella Pty Ltd (ACN 095 976 042) (you) by the administering authority. The administering authority is the Chief Executive of the Department of Environment and Science (the department).

The EPO is issued with respect to the activities of Coppabella Coal Mine on land described as Mining Lease (ML) 70164, ML70236, ML70237, ML70163, ML70161 and PL1015 situated at Peak Downs Highway, Coppabella (the premises).

A. Grounds

This EPO is issued on the following grounds:

- a) You are, or have been, contravening all or part of a condition of an environmental authority, pursuant to section 358(d) (iii) of the Act:

Condition A1 - Maintenance of Measures, plant and equipment.

The holder must:

1. Install all measures, plant and equipment to ensure compliance with the conditions of this environmental authority; and
2. Maintain such measures, plant and equipment in a proper condition; and
3. Operate such measures, plant and equipment in a proper manner.

Condition F8 – Regulated Structures must:

1. be designed and constructed in accordance with and conform to the requirements of the Manual for Assessing Consequence Categories and Hydraulic Performance of Structures (ESR/2016/1933);



2. be designed and constructed with due consideration given to ensuring that the design integrity would not be compromised on account of:
 - a. floodwaters from entering the regulated dam from any watercourse or drainage line; and
 - b. wall failure due to erosion by floodwaters arising from any watercourse or drainage line.
3. 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.

Condition G27 – Water Management Plan

A Water Management Plan must be developed and implemented by 27 February 2010 that provides for the proper and effective management of the actual and potential environmental impacts resulting from the mining activities and to ensure compliance with the conditions of the environmental authority.

- b) The department requires you to take reasonable measures to secure compliance with the EA to prevent a non-compliance with condition G1, pursuant to section 358(d) (iii) which states:

Condition G1 – Contaminant Release

Contaminants that will or have the potential to cause environmental harm must not be released directly or indirectly to any waters except as permitted under the conditions of this environmental authority.

- c) The department requires you to take reasonable measures to secure compliance with the General Environmental Duty, pursuant to section 358(d) (i) of the Act.

Section 319 of the Act states: 'A person must not carry out any activity that causes, or is likely to cause, environmental harm unless the person takes all reasonable and practical actions to prevent or minimise the harm (the general environmental duty)'.

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

1. You hold environmental authority (EA) EPML00579213, dated 13 April 2022. The EA approves the following environmentally relevant activities (ERA):

ERA 13 – Mining of black coal

ERA 8 – A petroleum or GHG storage activity, other than items 1 to 7, that includes an activity from Schedule 2 with an AES

ERA 31 – Mineral Processing 2: Processing, in a year, the following quantities of mineral product, other than coke, (b) more than 100,000t

ERA 33 – Crushing, milling, grinding or screening more than 5000t of material a year

ERA 63 – Sewage Treatment 1: Operating sewage treatment works, other than no-release works, with a total daily peak design capacity of (b-ii) more than 100 but not more than 1500EP otherwise.

2. The department is satisfied you are the entity operating the Coppabella Coal Mine.
3. On 20 October 2021, Registered Professional Engineer of Queensland (RPEQ) No. 4952 Henderson Geotech Pty Ltd carried out the annual inspection of regulated structures at Coppabella Coal Mine as required by condition F22 of EA EPML00579213.

4. On 5 April 2022, you submitted the 2021 Annual Regulated Structures Inspection Report for Coppabella Coal Mine, prepared by Henderson Geotech Pty Ltd in accordance with condition F25 of EA EPML00579213.
5. Condition F8 of EA EPML00579213 requires you to ensure regulated structures conform to the requirements of the Manual for Assessing Consequence Categories and Hydraulic Performance of Structures (ESR/2016/1933).
6. Condition F8 of EA EPML00579213 requires you to ensure the design integrity of the regulated structures would not be compromised by wall failure due to erosion from floodwaters.
7. Condition A1 of EA EPML00579213 requires you to maintain all measures, such as regulated structures, in a proper condition to ensure compliance with the conditions of the EA.
8. Condition A1 of EA EPML00579213 requires you to operate all measures, such as regulated structures, in a proper manner.
9. The RPEQ has identified that a regulated structure (the Worked Water Dam) does not meet the hydraulic performance standard defined in the Manual for Assessing Consequence Categories and Hydraulic Performance of Structures (ESR/2016/1933) with respect to protection against flood inundation, and is not in a proper condition.
10. The RPEQ has identified a risk of wall failure in the existing northern embankment of the Worked Water Dam should water levels due to flooding reach any persistent defect in the embankment.
11. The 2021 Annual Regulated Structures Inspection Report included actions recommended by the RPEQ to be undertaken immediately to rectify the defects and re-establish the hydraulic performance standard of the Worked Water Dam.
12. The 2020 Annual Regulated Structures Inspection Report also included these specific recommendations to be undertaken immediately to rectify the defects and re-establish the hydraulic performance standard of the Worked Water Dam.
13. The 2019 Annual Regulation Structures Inspection Report also included the specific recommendation to carry out action to rectify the structure in respect to protection against flood inundation.
14. To date, you have failed to commence these recommended actions.
15. You stated in correspondence on 20 May 2022 that the risks associated with the Worked Water Dam in its current condition, are managed with the Worked Water Dam operational TARP, with a maximum operating level of RL 211.
16. The 2021 Annual Regulated Structures Inspection Report states in section 2.1.2 “in 2021 the water level in Worked Water Dam was above the maximum operating level stated in the Operational Plan for a total of 23 days”. The maximum operating level is RL 211.
17. The department alleges you have contravened condition F8 of EA EPML00579213 by failing to ensure that a regulated structure conforms to the requirements of the Manual for Assessing Consequence Categories and Hydraulic Performance of Structures (ESR/2016/1933).
18. The department alleges you have contravened condition A1 of EA EPML00579213 by failing to maintain all measures, including a regulated structure, in proper condition.
19. The department alleges you have contravened condition A1 of EA EPML00579213 by failing to operate all measures in a proper manner.

20. On 5 September 2022 you provided the report titled ‘*Coppabella Coal Mine Review of Worked Water Dam August 2022*’ prepared by Henderson Geotech Pty Ltd, which details recommended actions required to be undertaken to reduce the risk of failure of the Worked Water Dam. The recommended actions include:
- Recommended Action 1 - Continue to operate the Worked Water Dam under the maximum operating level of 211m. This requirement can only be removed if and when a new northern embankment is constructed in accordance with a certified design plan.
 - Recommended Action 2a - Until the Western Diversion is operational, the risk of flood ingress could be averted by removing the haul road crossing causeway such that the road across the creek channel has the same bed level and at least the same cross-section as the creek immediately upstream and downstream. A Trigger Action Response Plan (TARP) needs to be developed to ensure that the work could be completed in response to an appropriate creek level trigger as a result of a flood and/or rainfall event.
 - Recommended Action 2b - Trim the creek-side embankment batter to an even surface and cover it with HDPE liner, anchored in front of the toe and behind the crest. The remaining risk of floodwater entering the dam could then be controlled by temporarily raising the spillway, such as by sandbagging, if a major flood threatened. A TARP would need to be developed to ensure that the work could be completed in time.
21. On 30 November 2022, you advised that the RPEQ amended the recommended action listed in point 20. a) above to reflect the following:
- Continue to operate the Worked Water Dam under the maximum operating level of 213m. This requirement can only be removed if and when a new northern embankment is constructed in accordance with a certified design plan.
22. The department acknowledges that you are currently operating and are committed to continuing to operate the Worked Water Dam in accordance with the recommended action listed in point 21. a) above.
23. Condition G1 of EA EPML00579213 states that contaminants that will or have the potential to cause environmental harm must not be released directly or indirectly to any waters except as permitted under the conditions of this environmental authority.
24. Section 11 of the Act defines contaminants as:
- 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.*
25. Mine affected water (a liquid) is considered a contaminant pursuant to section 11 of the Act.
26. The department considers that there is a risk of an unauthorised release of mine affected water from the Worked Water Dam (regulated structure) to 30 Mile Creek if you fail to take action to remediate the defects identified by Henderson Geotech Pty Ltd (RPEQ).

2021 Pre-Wet Season Compliance Inspection

27. Following the 2021/2022 Pre-Wet Season Inspection conducted on 29 September 2021, the department afforded you the opportunity to address and rectify a number of matters of concern identified including:
- a) the culverts under the 'Superhighway' haul road which were severely damaged and based on visual observations would impact flow during high-flow events. You committed to undertaking modelling and investigations to re-design the haul road culverts, which has not progressed to date.
 - b) heavily silted mine affected water storages which were addressed by you, however you have failed maintain the storages in a proper condition.
28. Following the 2021/2022 Pre-Wet Season Inspection on 29 September 2021, you made a commitment to the department in writing to complete the modification of the 'Creek Pit' haul road causeway to a bed level crossing by 30 July 2022, which has not been completed.

2022 Pre-Wet Season Compliance Inspection

29. On 11 October 2022, the department conducted a pre-wet season compliance inspection at Coppabella Coal Mine. During the inspection, officers of the department inspected the following locations described as:
- a) Snake Drain associated with the Coal Handling and Processing Plant (CHPP);
 - b) ROM Dam associated with the ROM Stockpile Area adjoining the CHPP;
 - c) Product Stockpile Dam adjoining the CHPP;
 - d) Return Water Dam which is a release point structure and corresponds with the location of Release Point 2 in the EA;
 - e) Worked Water Dam which is a release point structure and corresponds with the location of Release Point 1 in the EA;
 - f) The Western Drain at the western toe of the Co-Disposal Area;
 - g) Sediment Dam 9 situated to the south of the superhighway culverts; and
 - h) Superhighway culverts under a haul road crossing 30 Mile Creek.
30. Officers observed the following:
- a) Mine affected water storages to be heavily silted and appearing to have significantly reduced operational capacity, including Snake Drain, ROM Dam, Product Stockpile Dam, Return Water Dam and Sediment Dam 9;
 - b) Worked Water Dam to be heavily silted in the location where water from the Return Water Dam is pumped in;
 - c) Western drain along the toe of the Co-Disposal Area to be heavily silted; and
 - d) Culverts in 30 Mile Creek under the 'Superhighway' haul road to be severely damaged, being entirely and partly blocked by sediment build up and fallen rock.
31. On 5 August 2022 you provided a copy of the Water Management Plan (version 5, dated 15 February 2022) for Coppabella Coal Mine.
32. The department conducted a review of the Water Management Plan and identified the following:

- a) The plan requires you to implement maintenance actions, such as desilting, for water management structures to ensure ongoing operational capacity when routine monitoring indicates siltation is causing loss of water storage capacity.
33. The department considers that you have contravened condition G27 of the EA by not implementing the Water Management Plan properly, which has resulted in lost operational capacity in your water management system and a poorly maintained water management system;
34. The department alleges you have contravened condition A1 by failing to maintain and operate the water management system in a proper condition.
35. The department alleges you have contravened condition A1 by failing to maintain and operate the culverts in 30 Mile Creek under the Superhighway haul road in proper condition.
36. The department alleges that you have failed to meet your general environmental duty as you have failed to take all reasonable actions to prevent or minimise potential environmental harm associated with the defective embankment of the Worked Water Dam.
37. The department considers that the contraventions of all or parts of conditions **A1, F8, G1** and **G27** of the EA, as well as the general environmental duty, indicate that there are significant issues regarding the management, identification, control and risk mitigation of water and regulated structure management on the site and that you need to address this as a matter of priority.
38. On 7 December 2022, you met with the department to discuss the requirements of this EPO.

B. Requirements

In accordance with this EPO, you are required to do the following:

Worked Water Dam	
Requirement 1	By 20 December 2022 , you must complete recommended action 2a detailed in the report titled 'Coppabella Coal Mine Review of Worked Water Dam August 2022' prepared by RPEQ No. 4952 and dated 5 September 2022 and listed in point 20 (Recommended Action 2a) above. You must submit the TARP to the department to CWES Mackay@des.qld.gov.au by 4pm on 20 December 2022 .
Requirement 2	Following the completion of requirement (1) and prior to 20 December 2022 , you must provide the department with written endorsement from a suitably qualified and experienced person that the TARP developed and implemented under requirement (1) meets the requirements of recommended action 2a as detailed in the report titled 'Coppabella Coal Mine Review of Worked Water Dam August 2022' prepared by RPEQ No. 4952 and dated 5 September 2022. You must submit the written endorsement from a suitably qualified and experienced person to the department to CWES Mackay@des.qld.gov.au by 4pm on 20 December 2022 .
Water Management System	
Requirement 3	By 1 June 2023 , you must take action and complete desilting of the following water storages: a) Snake Drain;

	b) ROM Dam; c) Product Stockpile Dam; d) Return Water Dam; e) The Western Drain of the Co-disposal; f) Sediment Dam 9; and g) any other structures identified by you to have lost operational capacity due to siltation.
Requirement 4	By 4pm on 5 June 2023, you must provide written confirmation to the department confirming the completion of requirement (3). The written correspondence must also include photos of all completed works required by requirement (3).
Requirement 5	The written confirmation required by requirement 4 must be submitted to CWES_Mackay@des.qld.gov.au.
Requirement 6	By 28 February 2023, you must engage an appropriately qualified person (AQP) to undertake an assessment of the current mine water management system on site to: a) determine its current effectiveness in managing water at Coppabella Coal Mine for all stages of mining; b) determine its effectiveness in managing actual and potential environmental impacts resulting from water management associated with the mining activities of Coppabella Coal Mine for all stages of mining; and c) ensure compliance with condition G27; and d) determine any additional management measures (including infrastructure) or changes to the current water management measures required to ensure compliance with the EA.
Requirement 7	By 4pm on 28 February 2023, you must provide written confirmation to the department confirming the engagement of an AQP to complete requirement (6).
Requirement 8	By 4pm on 1 June 2023, you must provide a letter from the AQP outlining the findings of requirement (6) and an updated Water Management Plan reflecting the outcomes of requirement (6).
Requirement 9	The updated Water Management Plan submitted to meet requirement (8) must include the TARP developed in accordance with requirement (1) and (2).
Superhighway Haul Road Culverts	
Requirement 9	You must engage an AQP to complete the requirements 10 of this EPO.
Requirement 10	By 4pm on 28 February 2023, you must submit to the department written endorsement from an AQP that the culverts under the Superhighway Haul Road crossing 30 Mile Creek are fit for purpose for conveying flows through 30 Mile Creek.

Definitions

‘Appropriately qualified person’ is defined as a person or persons who has professional qualifications, training, skills or experience relevant to the nominated subject matter and can give authoritative assessment, advice and analysis of performance relative to the subject matter using the relevant protocols, standards, methods or literature.

‘Certification’ means assessment and approval must be undertaken by a suitably qualified and experienced person in relation to any assessment or documentation required by this Manual, including design plans, ‘as constructed’ drawings and specifications, construction, operation or an annual report regarding regulated structures, undertaken in accordance with the Board of Professional Engineers of Queensland Policy Certification by RPEQs (ID:1.4 (2A)).

‘Certifying, certify or certified’ means have a corresponding meaning as ‘certification’.

‘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 purposes of preparing a design plan.

Suitably qualified and experienced person’ in relation to regulated structures, is defined as a person who is a Registered Professional Engineer of Queensland (RPEQ) under the provisions of the Professional Engineers Act 2002, and has demonstrated competency and relevant experience:

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

C. Obligations

If you propose to dispose of the place or business to which the EPO relates, you **must** advise the buyer of the existence of this EPO.

If you cease to carry out the activity to which this EPO relates, you **must** give written notice of ceasing to carry out the activity to the department within 10 days of ceasing the activity.

Take notice:

- the requirements of this order take effect immediately upon service of the order;
- failure to comply with this order is an offence under the EP Act;
- this order remains in force until further notice from the administering authority.

D. Penalty

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

Failure to comply with an EPO is an offence.

- The maximum penalty for wilfully contravening an EPO is 6250 penalty units, totalling \$ 898,437 or five years imprisonment for an individual or \$ 4,492,187 for a corporation.

- The maximum penalty for contravening an EPO is 4500 penalty units, totalling \$ 646,875 for an individual or \$ 3,234,375 for a corporation.

Failure to provide written notice to the buyer of the existence of the order is an offence.

- The maximum penalty is 50 penalty units, totalling \$ 7,187 for an individual or \$ 35,937 for a corporation

Failure to provide written notice to the department within 10 business days of ceasing the activity to which an environmental protection order relates is an offence.

- The maximum penalty is 50 penalty units, totalling \$ 7,187 for an individual or \$ 35,937 for a corporation.

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

E. Reviews and appeals

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

A person who is dissatisfied with an original decision made by the Department of Environment and Science (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 are to be sent to Permit and Licence Management, Department of Environment and Science: via email at palm@des.qld.gov.au , or by mail to the following address: GPO. Box 2454, Brisbane, QLD, 4001.

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*.

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

Pursuant to section 540 of the Act, the department is required to maintain a register of certain documents and information authorised under the 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 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.

Notice
Environmental Protection Order

Should you have any queries in relation to the notice, please contact Rebecca Freese on telephone number (07) 4999 6814.



Signature

14/12/2022

Date

Alisha Stewart

Manager (Compliance)
Delegate of the Chief Executive
Department of Environment and Science
Environmental Protection Act 1994

Enquiries: Mackay Compliance Centre
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