

Notice

Environmental Protection Act 1994

Environmental Protection Order

This environmental protection order is issued by the administering authority pursuant to section 358 of the Environmental Protection Act 1994.

Alphadale Pty Ltd
44-46 SIXTH STREET,
SOUTH TOWNSVILLE, QLD, 4810

Cc: Peter Curtain p.curtain@curtainbros.com.au

Cc: Donna Bath d.bath@curtainbros.com.au

Your reference: EPML00771413

Our reference: STAT1171

Dear Sir/Madam

Take notice: that under the *Environmental Protection Act 1994* (the Act) this Environmental Protection Order (EPO) is issued to Alphadale Pty Ltd, by the administering authority. The administering authority is the Chief Executive of the Department of Environment and Heritage Protection (the department).

The EPO is issued in respect to activities at Mining Leases 10168, 10175 and 10192 on land described as Lot 1 on SP272205 (the project site).

A. Grounds

This EPO is issued on the following grounds:

1. Section 358 (d)(i) of the Act states that the administering authority may issue an EPO to secure compliance by the person with the general environmental duty.

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

- 1) Alphadale Pty Ltd is the holder of Environmental Authority EPML00771413 (EA) for the project site.
- 2) The following environmentally relevant activities (ERAs) stipulated under the Environmental Protection Regulation 2008 are authorised to be undertaken at the project site:
 - a) ERA 31(2a) Mineral processing >1,000t but <100,000t per year.
 - b) ERA 60(1a) Waste disposal <50,000t yr.
 - c) ERA 60(1d) Waste disposal >200,000t yr.
 - d) ERA 16 mining gold ore.

- 3) Two compliance inspections were conducted by authorised officers on 3 March 2016 and 30 June 2016 in the presence of Alan Matthews, Site Senior Executive (SSE) for Alphadale Pty Ltd. During these inspections, officers observed that the Impoundment Dam contained water. Pumping infrastructure was also observed to be in place. It was discussed with Alan Matthews that pumping may again be needed to ensure that the Impoundment Dam was empty prior to the wet season.
- 4) During the inspection on 30 June 2016, the department took water quality samples from:
 - a) the Barren Pond and the level of arsenic was 53.7 mg/L; and
 - b) the Impoundment Dam and the level of arsenic was 23.3 mg/L;

The water quality in these structures exceeded the EA contaminant limit (Schedule C Table 3 Water Quality Limits for Heap Leach Containment System) for total arsenic of 0.5mg/L.

- 5) The department issued a "Decision on proposal to suspend an environmental authority" to Alphadale Pty Ltd, 18 August 2016 on the grounds that "You [Alphadale Pty Ltd] were issued an annual notice for the environmental authority, and you have not complied with the notice as the annual fee required to be paid by the notice has not been paid." No response was received from Alphadale Pty Ltd, and the EA was suspended on 18 August 2016.
- 6) Authorised officers obtained consent from Alphadale Pty Ltd representatives to enter the project site and undertook a compliance inspection on 6 April 2017. The inspection was to assess compliance with the general environmental duty (GED), the conditions of the suspended EA and with the requirements of EPO STAT1076.
- 7) Water quality samples were collected from the Raw Water Dam, Impoundment Dam and Gorge Creek seepage point adjacent to the Impoundment Dam.
- 8) Water samples from the Impoundment Dam were found to exceed the EA contaminant limit (Schedule C Table 3 Water Quality Limits for Heap Leach Containment System) for total arsenic. The result for the water sample from the Impoundment Dam shows a total arsenic concentration of 37.4mg/L (EA Contaminant Limit 0.5mg/L). The Impoundment Dam had a pH of 9.16 which is non-compliant with the EA range for pH of 6-9.
- 9) During the inspection, water was observed in the historical pit located north-west of the heap leach. There was visible surface water runoff from the containment of the pit, across the road and entering Gorge Creek. Water samples were collected from the pit. There was not a sufficient quantity of water at this location in Gorge Creek to take a water sample.
- 10) Water samples results from the pit identified an exceedance the EA contaminant limit (Schedule C Table 2 Receiving Water Contaminant Limits) for total aluminium. The water sample from the pit had a total aluminium concentration of 15mg/L (EA Contaminant Limit 5mg/L). The pit water was also had a pH of 3.39 which is non-compliant with the EA range for pH of 6-9.
- 11) Seepage from the pit potentially entered Gorge Creek. The pit water was non-compliant with the ANZECC guidelines for livestock drinking water quality levels and aquatic ecosystems and the Draft Environmental Values and Water Quality Guidelines for Burdekin River Basin fresh and estuarine waters.
- 12) Gorge Creek flows from west to east through the mining lease area. Water entering Gorge Creek will flow east to leave the mining lease and enter the Gray Creek sub-catchment, part of the Upper Burdekin River Basin.
- 13) During the compliance inspection on 6 April 2017, authorised officers identified non-compliances with the suspended EA as follows:

- a) Condition A2-1 of the EA states "The environmental authority holder must ensure: a) that all measures, plant and equipment necessary to ensure compliance with the conditions of this environmental authority are installed; and b) that such measures, plant and equipment are maintained in a proper condition; and that such measures, plant and equipment are operated in a proper manner." Officers observed that significant slumping of the heap leach had occurred, causing the launders and inlet to the process ponds to be obstructed. Due to the blockages of the heap leach launder, contaminated water would likely run off the heap into the receiving environment and not be captured by the process ponds and Impoundment Dam. Erosion of the heap leach was observed to have occurred, with heap leach material observed outside of the lined launder structure. The launder liner was also observed to be damaged in places.
 - b) Condition F1-1 of the EA states "All areas significantly disturbed by mining activities must be rehabilitated to a stable landform and meet the final land description as defined in Schedule F – Table 1." Significant erosion on the heaps front, sides and rear was observed, with ore present outside of the launder. The structure was observed to no longer be retaining a contoured stable, safe and non-polluting shape.
 - c) Condition F3-1 of the EA states "Residual voids must comply with the following outcomes; a) residual voids must not cause any serious environmental harm to land, surface waters or any recognised groundwater aquifer, other than the environmental harm constituted by the existence of the residual void itself and subject to any other condition within this environmental authority." As described above, officers observed evidence that water had seeped from the containment of the pit, crossed the road and entered Gorge Creek. This contaminated water could potentially cause serious environmental harm to the aquatic ecosystem values in Gorge Creek.
 - d) Condition F4-3 of the EA states "The holder of the environmental authority must design, construct and operate all high hazard dams containing hazardous waste in accordance with the *Code of Environmental Compliance for High Hazard Dams Containing Hazardous Waste*." The heap leach launder and dam liner was observed to not be present, or damaged, in a number of places. Holes, rips and failed welds were observed in the liner that remains in place. The holder of the environmental authority has not met Condition 1 General Obligation, of the Standard Environmental Conditions contained within the *Code of Environmental Compliance for High Hazard Dams Containing Hazardous Waste* by not acting to "design, construct, alter, repair, maintain and operate" the Impoundment Dam.
- 14) During the compliance inspection on 6 April 2017, authorised officers identified non-compliances with EPO STAT1076 as follows:
- a) Requirement 3 a) of EPO STAT1076 states "Ensure appropriately qualified and experienced personal are at the premises to ensure compliance with this EPO; and." authorised officers did not encounter any Alphadale Pty Ltd personnel or representatives onsite at the time of the inspection.
 - b) Requirement 3 b) of EPO STAT1076 states "Secure and maintain all infrastructure necessary to ensure compliance with the requirements of the EPO and that may be required for the ongoing mitigation of environmental risks and/or site rehabilitation is functional and operable; and." The heap leach launder and dam liner was observed to be damaged in a number of places, with holes, rips and failed welds in the liner. A location where a pump had previously been installed (suction hoses terminated at location on pond banks & weathered hydrocarbon spills) was identified, however no pump was in place. No measures, plant or equipment necessary for the compliance with the EA were observed to be either onsite (plant & equipment), or maintained (clear launders, continuous liners for Impoundment Dam) during the inspection by departmental officers.
 - c) Requirement 3 c) of EPO STAT1076 states "Maintain fuel supplies and access to power to ensure the ongoing operation of required measures, plant and equipment to ensure compliance with this EPO." No fuel supply equipment was observed during the inspection.

- d) Requirement 5 of EPO STAT1076 states "Provide a written monthly report to the department detailing all actions taken to ensure compliance with the requirements of this EPO." No written monthly reports have been received by the administering authority.
- 15) Alphadale Pty Ltd have not complied with conditions of the suspended EA as stated above.
- 16) Alphadale Pty Ltd have not complied with requirements of the EPO, as stated above, and are considered to have committed an offence under section 361(1) of the Act.
- 17) Alphadale Pty Ltd have not exercised the general environmental duty by taking all reasonable and practicable measures to prevent or minimise harm to the environment while undertaking out an environmentally relevant activity.

B. Requirements

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

- 1) Immediately upon receipt of this EPO, you must take all necessary actions to prevent any unauthorised release of contaminants from the project site to the receiving environment.
- 2) Within five (5) business days of receipt of this EPO, you must provide in writing to the department the name and contact details of a suitable representative who is authorised to act on behalf of Alphadale Pty Ltd. Should these details change, or the contact person change, you must provide a written update to the department within twenty-four (24) hours of either change occurring.
- 3) In accordance with the Act, Section **360 Form and content of order**, an environmental protection order: *"may impose a reasonable requirement relevant to a matter or thing mentioned in section 358;"*.
 - a) It is considered a reasonable requirement relevant to securing compliance by you with the general environmental duty and the conditions of your environmental authority to state that the actions required by this program must be completed by an **appropriately experienced and qualified person**.
 - b) An **appropriately experienced and qualified person** is, a person who has professional qualifications, training, and experience relevant to the nominated subject matter, and who can give authoritative assessment, advice and analysis on performance relative to the subject matter using relevant protocols, standards, methods and literature.
- 4) Within fifteen (15) business days of receipt of this EPO, you must submit to the department a program which determines the likelihood and consequences of environmental harm which may occur as a result of an unauthorised release of contaminants from the project site to the receiving environment. The program must include ongoing controls and management to prevent the unauthorised release of contaminants from the project site. The program must, as a minimum:
 - a) Assess erosion and stability of the heap leach stockpile;
 - b) Assess the current structural state and hydraulic performance of the Impoundment Dam including process ponds and ancillary works associated with a heap leach pad;
 - c) The assessment must be in accordance with the "Manual for assessing consequence categories and hydraulic performance of structures" (ESR/2016/1933).
 - d) Identify all potential sources of contaminants on site including the historical pit;
 - e) Identify contamination pathways from identified contaminant sources to the receiving environment;

- f) Where contamination pathways have been identified, the program must detail the control measures to be implemented by you to prevent the unauthorised release of contaminants to the receiving environment;
 - g) Identify all necessary infrastructure, plant, equipment and measures required to comply with this EPO and the EA;
 - h) Include timeframes for the completion of Requirements 4 a) to 4 g); and
 - i) Include ongoing monitoring of the site and continuous review of the program.
- 5) The program detailed in Requirement 4 must be developed by an **appropriately qualified and experienced person**.
- 6) You must not materially alter or dispose of any infrastructure, plant or equipment on the site that is necessary to ensure compliance with the requirements of EPO and the EA.
- 7) You must maintain fuel supplies and access to power to ensure the ongoing operation of required measures, plant and equipment to ensure compliance with this EPO and the EA.
- 8) You must implement the program within the nominated timeframes in accordance with Requirement 4 h).
- 9) By 1 November 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 (or network of linked containment systems).
- 10) You must provide a report to the department on 1 November and 1 April every year while this EPO remains in force. The report must address the requirements of this EPO, and must provide an update on progress the works being undertaken.
- 11) You must notify the department within twenty-four (24) hours of becoming aware of any non-compliance with the requirements of this EPO.
- 12) The requirements of the EPO continue to apply to you despite environmental authority EPML00771413 being cancelled, surrendered, suspended or otherwise brought to an end including by force of law.

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 Act;
- this order remains in force until further notice from the administering authority.

D. Penalty

Failure to comply with an EPO is an offence.

- The maximum penalty for an individual for wilfully contravening an EPO is 6250 penalty units, totalling \$788,437.50 or five years imprisonment.

- The maximum penalty for a corporation for wilfully contravening an EPO is 31,250 penalty units, totalling \$3,942,187.50.
- The maximum penalty for an individual for contravening an EPO is 4500 penalty units, totalling \$567,675.
- The maximum penalty for a corporation for contravening an EPO is 22,500 penalty units, totalling \$2,838,375.

Failure to provide written notice to the buyer is an offence.

- The maximum penalty for an individual is 50 penalty units, totalling \$6,307.50.
- The maximum penalty for a corporation is 250 penalty units, totalling \$31,537.50.

Failure to provide written notice within 10 business days of ceasing the activity to the department is an offence.

- The maximum penalty for an individual is 50 penalty units, totalling \$6,307.50.
- The maximum penalty for a corporation is 250 penalty units, totalling \$31,537.50.

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

E. Reviews and appeals

The provisions regarding review of decisions and appeals may be found in sections 519 to 539 of the Act.

A person who is dissatisfied with certain decisions of the department, may be able to apply to have the department review that original decision.

Generally, a request to have a decision reviewed must be made:

- within 10 business days of the decision being notified to the person;
- be supported by enough information to enable the department to decide the application for review; and
- be made using the application for review of an original decision form ([ESR/2015/1573](#)).¹

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 appeal against that decision to the relevant court within 22 business days after receiving notice of the review decision.

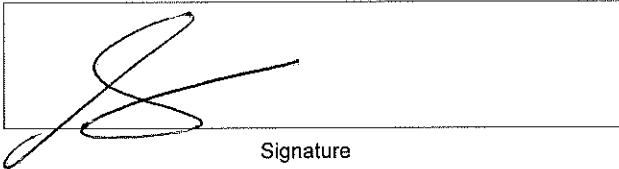
A person whose interests are or would be adversely affected by a decision of the department may also be able to request a statement of reasons for a decision or a statutory order review under the *Judicial Review Act 1991*.

For further information about reviews and appeals see the information sheet - internal review and appeal to the Planning and Environment Court ([ESR/2015/1572](#)). You may have other legal rights or obligations and should seek your own legal advice.

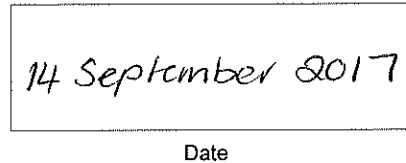
¹ This is the publication number. The publication number can be used as a search term to find the latest version of a publication at <www.ehp.qld.gov.au>.

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Should you have any queries in relation to the notice, please contact Genevieve Tassan on telephone number (07)4722 5360.



Signature



Date

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Department of Environment and Heritage Protection
Environmental Protection Act 1994

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