

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.

Mackay Sugar Limited
ACN: 057 463 671
372 Anzac Avenue
MARIAN QLD 4753

Your reference: EPPR00423513

Our reference: CR70825 / STAT1398 / STAT- E-100089105

~~5 August 2019~~ 23 April 2021

Dear Directors

Take notice: that under the *Environmental Protection Act 1994* (the Act) this amended environmental protection order (EPO) is issued to Mackay Sugar Limited (you) by the administering authority. The administering authority is the Chief Executive of the Department of Environment and Science (the department).

The amended EPO is issued in respect to the activities of Mackay Sugar Limited at Racecourse Sugar Mill on land described as Lot 1 and 2 RP703613, Lot 1 and 2 RP704750, Lot 1 and 2 RP723347, Lot 1 RP704739, Lot 1 RP732066, Lot 2 CP854468, Lot 3 and 4 RP704748, Lot 632 CP859415, Lot 8 RP904457, Lot 9 RP749853. situated at Peak Downs Highway, Racecourse (the premises).

This EPO was originally issued on 21 August 2019 and is amended on 21 April 2021. New text in the amended EPO is shown as underlined and deleted text is shown as strikethrough. The EPO issued on 21 August 2019 remained in force until the issue of this amended EPO.

A. Grounds

This EPO is issued on the following grounds:

- Mackay Sugar Limited (MSL) holds environmental authority (EA) EPPR00423513, previously development permit ENDC00437305. The EA approves environmentally relevant activity (ERA) 28 - sugar milling or refining, consisting of either –
 - a) Crushing or grinding 200t or more of sugar cane in a year; or
 - b) Manufacturing 200t or more of sugar or other sugarcane products in a year.

- Since November 2015, the department has received numerous reports from community members regarding odour nuisance and alleged health effects associated with effluent treatment ponds that receive waste water from Racecourse Sugar Mill.
- On 15 May 2018, you were issued a notice to conduct or commission an environmental evaluation (investigation) as the department was satisfied on reasonable grounds that the effluent treatment ponds associated with Racecourse Sugar Mill are causing, or are likely to cause environmental harm on the environmental values of air (odour nuisance) and possibly surface water.
- On 22 October 2018, an amended notice to conduct or commission an environmental evaluation (investigation) was issued to you, in response to a request for an extension.
- On 28 February 2019, an environmental report was submitted by you to the department.
- On 14 March 2019, a notice requesting further information was issued to you by the department.
- On 16 May 2019, a response to the notice requesting further information was submitted by you to the department.
- On 28 May 2019, the department issued you with a notice accepting the environmental report as it adequately addressed the relevant matters for the environmental investigation.
- On 21 August 2019, EPO STAT1398 was issued to you.
- The department considers that you have met all preceding requirements of EPO STAT1398.
- On 22 March 2021, the department received a letter from you requesting an extension to the due date to complete all works identified in the program of works (Requirement 8) and extension of the due date of the final report (Requirement 9).
- The letter provided supporting information and justification for the extension of the timeframes.
- In accordance with section 358 of the *Environmental Protection Act 1994*, the department is issuing an amended environmental protection order to you as it is satisfied, because of the information submitted as required by the environmental evaluation that unlawful environmental harm (nuisance) is being or is likely to be caused.

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

- On 28 February 2019, the following documents, prepared by CQG Consulting on behalf of Mackay Sugar Limited, were submitted to satisfy the environmental report requirement of the environmental evaluation:
 - *'Mackay Sugar Limited, Racecourse Mill Effluent Pond Environmental (Odour) Assessment – Environmental Evaluation STAT1122, February 2019'*
 - *'Technical Memorandum, MSL Environmental Evaluation, Remedial Options Assessment, 27 February 2019'*
- The documents indicated the following issues:
 - The water quality of the effluent ponds is responsible for the generation of H₂S and thus odour nuisance;
 - Accumulation of sludge in Pond 1 has decreased the depth and retention time and in conjunction with a low pH, allows H₂S to be readily released to the atmosphere;
 - Elevated levels of sulphide reducing bacteria are present in all three effluent ponds;

- Based on monitoring data, H₂S was detected at the downwind monitoring site 85% of the days during the crushing season and 40% of the days during the non-crushing season. The highest H₂S concentration was measured on 18 October 2018 as 0.079 ppm where measurement ranged from 0.011 ppm to 0.018 ppm with a sustained measurement of 20 minutes. These levels are above the Environmental Protection Policy (Air) for H₂S.
- Lack of adequate aeration at Pond 1 and Pond 3 were reported. The existing aerators are unreliable and inadequate in providing sufficient dissolved oxygen;
- The current screen at Racecourse Sugar Mill is inadequate to reduce the discharges of solids (bagasse and cane trash) to the effluent ponds;
- The current ash clarifier is operating above the designed capacity. This is causing the ash to enter in the effluent stream. Ash contributes to the sulphates present in the effluent and provide food to the sulphide reducing bacteria that can cause odour generation at the effluent ponds;
- There is insufficient data recorded on the quality and quantity of effluent flows from the various effluent sources and the effluent ponds; and
- There are no written procedures for odour management at Racecourse Sugar Mill.
- The department considers that you have met all preceding requirements of EPO STAT1398.

B. Requirements

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

1. You must engage an appropriately qualified person (AQP) to complete the requirements of this EPO. The definition of an appropriately qualified person is provided at the bottom of this notice.
2. By **30 January 2020**, you must have completed the trials of the odour inoculant treatment strategy and installed additional aeration at the effluent ponds, as recommended in the document titled '*Remediation Options Assessment*' submitted as part of the environmental report.
3. By **30 January 2020**, you must have completed the trials of pH stabilisation of the effluent using chemicals (lime), as recommended in the document titled '*Remediation Options Assessment*' submitted as part of the environmental report.
4. By **30 April 2020**, you must submit to the administering authority, an investigation report into effluent management at Racecourse Sugar Mill.

The report must include:

- a) the identification of additional sources of contaminants within the effluent stream including the Mill, Co-generation Plant and Refinery;
 - b) an assessment of the costs and suitability of installing continuous real time monitoring of the effluent from each stream to the ponds, including flow rate and parameters that are linked to the generation of H₂S, including but not limited to pH and dissolved oxygen (DO); and
 - c) options to increase effluent storage capacity, including desilting Pond 1.
5. By **30 November 2020**, you must submit to the administering authority, an investigation report into alternative effluent treatment options, including the installation of a primary settler prior to the effluent screen / transfer system at Racecourse Mill. The report must include a cost benefit analysis.

6. By **30 November 2020**, you must submit to the administering authority, a program of works to implement the recommendations from the investigation reports in Requirements 4 and 5.

Any comments made by the administering authority must be considered and where determined appropriate in consultation with the administering authority, must be included or implemented into the program of works.

7. By **30 November 2020**, you must develop and implement an Odour Management Plan to provide for the effective management of actual and potential environmental impacts resulting from the effluent ponds.

The plan must include as a minimum:

- a) Identification of all potential sensitive and commercial places which may be affected by odour nuisance from the effluent ponds;
 - b) Identification of all sources of odour (H₂S) emissions generated by the activity that may occur as a result of storing and treating effluent from Racecourse Sugar Mill;
 - c) Identification of adverse conditions (meteorological or operational) that may result in odour nuisance at a sensitive or commercial place;
 - d) Integration of odour control strategies, including regular maintenance of plant and equipment to minimise the potential for odour emissions; and
 - e) Procedures to be undertaken if complaints regarding odour nuisance are received, including monitoring and odour abatement measures to be immediately implemented to prevent further environmental nuisance.
8. By ~~**29 November 2021**~~, **29 November 2022**, you must have completed the works identified in the program of works as required by Requirement 5.
9. By ~~**31 December 2021**~~, **31 December 2022**, you must submit a report that outlines how compliance with this notice has been achieved.

An **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.

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 a corporation for wilfully contravening an EPO is 31,250 penalty units, totalling \$4,079,687.50.
- The maximum penalty for a corporation for contravening an EPO is 22,500 penalty units, totalling \$2,937,375.

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

- The maximum penalty for a corporation is 250 penalty units, totalling \$32,637.50.

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

- The maximum penalty for a corporation is 250 penalty units, totalling \$32,637.50.

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 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 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.

Should you have any queries in relation to the notice, please contact ~~Rebecca Munro~~ Matthew Barden on telephone number ~~4999 6863~~ (07) 4999 6850 or via CWES_mackay@des.qld.gov.au.

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>.



Signature

23 April 2021

Date

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Delegate of the Chief Executive
Department of Environment and Science
Environmental Protection Act 1994

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