

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)
Racecourse Mill
Peak Downs Highway
Racecourse via Mackay, QLD, 4740

Your reference: EPPR00423513

Our reference: STAT-E-100436043

31/05/2023

Dear Director

Take notice: that under the *Environmental Protection Act 1994* (EP Act) this environmental protection order (EPO) is issued to Mackay Sugar Limited (you) ACN 057 463 671 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 your activities at the following locations (the premises):

1. Marian Mill (Lot/Plan 3/CP907076, 2/RP721609, 63/SP278411, 1/RP727930, 2/RP895328, 4/RP895328, 1/RP710736, 1/CP892187, 5/RP709232, 1/RP702186, 2/RP702186, 3/RP702185, 4/RP702185, 1/RP719137, 2/RP719137, 6/RP702194, 1/RP702197) situated at Anzac Avenue, Mackay QLD 4753.
2. Racecourse Mill (Lot/Plan 2/CP854468, 800/SP244960, 100/SP244960, 1/RP704739, 1/SP289789, 4/RP704748, 9/RP749853, 3/RP704748, 1/RP703613, 1/RP704750, 1/SP221679, 3/SP221679, 2/RP723347, 1/RP723347, 1/RP704747, 2/RP704747) situated at the Peak Downs Highway, Racecourse QLD 4740.
3. Farleigh Mill (Lot/Plan 15/RP730576, 2/RP707240, 10/CP906317) situated at Armstrong Street, Farleigh QLD 4741.
4. Pleystowe Mill (Lot/Plan 31 SP312691, 32/SP129018, 3/SP276550, 5/RP836242, 4/RP704212) situated at Mackay-Eungella Road, Pleystowe QLD 4741.

A. Grounds

This EPO is issued on the following grounds:

1. You hold environmental authority (EA) EPPR00423513, dated 17 January 2023. The EA approves the following environmentally relevant activities at the premises:

- a. **ERA 15** – Fuel burning; and
 - b. **ERA 28** – Sugar milling or refining.
2. Previous versions of the current EA include EA EPPR00423513 dated 13 March 2020 and 29 April 2022. Where conditions have changed with an EA amendment, the EPO relates to non-compliance with the relevant condition at the time.
 3. You are, or have been, contravening all or part of a condition of EA EPPR00423513, pursuant to section 358(d) (iii) of the Act:

Condition A3 - Any incident, breach or receipt of monitoring results not in accordance with a condition of this environmental authority must be reported to the administering authority as soon as practicable but within 24 hours of becoming aware of the breach.

Condition A8 - The activity must be undertaken in accordance with written procedures that:

1. Identify potential risks to the environment from the activity during routine operations, closure and an emergency; and
2. Establish and maintain control measures that minimise the potential for environmental harm; and
3. Ensure plant, equipment and measures are maintained in a proper and effective condition; and
4. Ensure plant, equipment and measures are operated in a proper and effective manner; and
5. Ensure that staff are trained and aware of their obligations under the Environmental Protection Act 1994; and
6. Ensure that reviews of environmental performance are undertaken at least annually.

Condition C1 - Other than as permitted within this environmental authority, contaminants must not be released to any waters.

Condition C2 (EA dated 13 March 2020 and 29 April 2022) - The only contaminants to be released to surface waters are in accordance with Table 2 – Contaminant release points and monitoring point and Table 3 – Contaminant release limits.

Table 2 – Contaminant release points and monitoring point

Release Point (reference)	Receiving Waters	Release Point(s) Description (SDRS4 decimal degrees)	
		Latitude	Longitude
Raincourse (W1)	Ruddy Creek	-21.2093	149.1055
Playdown (W3)	Bakers Creek	-21.1554	149.0395
Farleigh (W4)	Amhurst Creek	-21.0989	149.0920
Marian downstream (W2.0) ¹	Perry Creek	-21.2355	148.9874
Marian Pond 5 (W2.1) ²	Cane drain to Perry Creek	-21.1771	148.9543
Marian Pond 4 (W2.2) ³	Cane drain to Perry Creek	-21.174	148.957
Marian Pond 5 (W2.3) ⁴	Cane drain to Perry Creek	-21.1767	148.9543

Table 3 – Contaminant release limits

Release / Monitoring Point (reference)	Quality characteristics	Limit (unit)	Limit Type	Frequency
W1, W2.0 ¹ , W2.1 ² , W2.2 ³ and W4	5 Day Biological Oxygen Demand	20 mg/L	80 th percentile	As soon as practicable after commencement of release but no later than 24 hours after commencing, and weekly thereafter. For successive releases from the same site under similar circumstances, only one sample per week is required.
	Suspended Solids	50 mg/L	Maximum	
	pH	6.5-8.5 pH	Range	
	Dissolved Oxygen	2 mg/L	Minimum	
W2.0 ¹ , W2.1 ² and W2.2 ³	Ammonia	0.9 mg/L	Maximum	Daily
W1	Flow	2800 m ³	Maximum per day	
W2.1, W2.2 and W2.3 ⁴		3900 m ³	Maximum per day	
W3		2800 m ³	Maximum per day	
W4		2800 m ³	Maximum per day	

¹ The release point release limits for downstream (W2.0) apply up to 1 January 2023.

² The release point release limits for Marian Pond 5 (W2.1) apply from 1 January 2023.

³ The release point release limits for Marian Pond 4 (W2.2) apply from 1 January 2023.

⁴ Marian Pond 5 (W2.3) ceases to be a release point once Marian Pond 5 (W2.1) becomes operational.

Condition C2 (EA dated 17 January 2023) - Point source releases

Until 30 May 2024, contaminants generated by the activity must not be released to waters unless the contaminants being released:

- a) are only released from the release points specified in Table 2 – Contaminant release points and monitoring points and Appendix 1 – Figures 1 to 8; and*
- b) are monitored at the monitoring locations specified in Table 2 – Contaminant release points and monitoring points and Appendix 1 – Figures 1 to 8 at the corresponding minimum monitoring frequency for each contaminant specified in Table 3 – Contaminant release limits; and*
- c) comply with the contaminant release limits for each contaminant specified for each monitoring point identified in Table 3 – Contaminant release limits.*

Table 2 – Contaminant release points and monitoring points

Classification	Description	Receiving Waters	Release Point(s) Description (GD/AS4 decimal degrees)	
			Latitude	Longitude
Release point and monitoring point	Racecourse (W1)	Rocky Creek	-21.2093	140.1055
Monitoring point	Marian downstream (W2.0)	Perry Creek	-21.2355	140.0874
Release point and monitoring point	Marian Pond 5 (W2.1)	Cane drain to Perry Creek	-21.1771	140.0543
Release point and monitoring point	Marian Pond 4 (W2.2)	Cane drain to Perry Creek	-21.1743	140.0508
Release point and monitoring point	Marian Pond 5 (W2.3)	Cane drain to Perry Creek	-21.1787	140.0543
Release point and monitoring point	Pleystowe (W3)	Bakers Creek	-21.1554	140.0395
Release point and monitoring point	Farleigh (W4)	Armstrong Creek	-21.0688	140.0920

Table 3 – Contaminant release limits

Monitoring Point	Contaminant	Limit (unit)	Limit Type	Monitoring Frequency
W1, W2.0, W3 and W4	5 Day Biological Oxygen Demand	20 mg/L	80 th percentile	As soon as practicable after commencement of release but no later than 24 hours after commencing, and weekly thereafter. For successive releases from the same site under similar circumstances, only one sample per week is required.
		50 mg/L	Maximum	
	Suspended Solids	30 mg/L	80 th percentile	
		60 mg/L	Maximum	
	pH	6.5-8.5 pH	Range	
	Dissolved Oxygen	2 mg/L	Minimum	
W2.0	Ammonia	0.9 mg/L	Maximum	
W1		2800 m ³	Maximum per day	Daily
W2.1, W2.2 and W2.3	Flow	3600 m ³	Combined maximum per day	
W3		2800 m ³	Maximum per day	
W4		2800 m ³	Maximum per day	

- 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. The general environmental duty is detailed in section 319 of the Act which states the following: '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).'
- This EPO is issued under section 358(d)(i) and section 358(d)(iii) of the *Environmental Protection Act 1994* to secure compliance with a condition of an EA and general environmental duty pursuant to section 319.

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

- You operate four (4) sugar mills being Marian Mill, Racecourse Mill, Farleigh Mill and Pleystowe Mill.
- EA EPPR00423513 authorises the release of contaminants (sugar mill effluent) to waters from authorised release points at the premises' as per Condition C2.
- The following facts and circumstances (numbers four (4) to 21) are based on conditions contained in EA EPPR00423513 effective 13 March 2020.
- Since 2021, the department has received an increasing number of notifications pertaining to non-compliant effluent quality and quantity releases, unauthorised effluent releases (overflows) and unauthorised releases of untreated effluent and contaminated stormwater to the receiving environment.

5. On 3 August 2021, you notified the department of a release of treated effluent from Farleigh Mill release point W4 on 21 July 2021 with a biochemical oxygen demand (BOD) concentration of 56mg/L, exceeding the maximum concentration limit of 50mg/L stipulated in Table 2, Condition C2 of the EA.
6. Between 23 August 2021 and 31 August 2021, you notified the department of three (3) dissolved oxygen (DO) non-compliances with condition C2 of the EA at the Marian Mill release point W2.0 to Perry Creek.
7. On 7 September 2021 the department issued an EPO for the non-compliant releases at Marian Mill. Environmental obligations to remedy the non-compliances were met and the EPO was finalised on 30 March 2022.
8. On 29 September 2021, you notified the department of a release of treated effluent from Racecourse Mill release point W1 to Rocky Creek on 23 September 2021 with a total suspended solids (TSS) concentration of 33mg/L, which did not comply with the 80th percentile limit stipulated in Table 3, Condition C2 of the EA (30mg/L).
9. On 29 September 2021, following an internal audit of your EA, you notified the department of a number of alleged non-compliances of condition C2 for the period 1 September 2020 to 29 September 2021 that were not reported to the department in accordance with condition A3 of EA EPPR00423513. The internal audit encompassed Marian, Pleystowe, Farleigh and Racecourse Mills and identified the following:
 - a. Six (6) exceedances of the 80th percentile TSS limit (total) for Farleigh and Racecourse Mills that were not reported in accordance with condition C2 of the EA;
 - b. One (1) exceedance of the minimum DO limit (2mg/L) as stipulated in condition C2 of the EA for Farleigh and Racecourse Mills that were not reported in accordance with condition C2 of the EA;
 - c. Sampling not being conducted within 24 hours of a release commencing at Marian and Racecourse Mills on five (5) occasions as required by condition C2 of the EA.
10. In addition, the exceedances were not reported to the department in accordance with condition A3 of the EA as the 80th percentile tracking system was not operating effectively.
11. You advised the department that algal blooms within the effluent storages were the cause of the non-compliant effluent that was being released to the receiving environment at Farleigh and Racecourse Mills.
12. In response to this, the department requested you develop an algae management plan to control and prevent algal blooms impacting the water quality at Racecourse and Farleigh Mills.
13. On 29 November 2021, you notified the department of an uncontrolled release of untreated effluent from the Surge Pond at Racecourse Mill that was identified on 28 November 2021. The Surge Pond was overflowing to an adjacent wetland during a rainfall event. The wetland was flowing into Small Creek at the time the overflow was identified by you. You estimated approximately 1.5ML of effluent was released to the wetland during the event.
14. On 1 December 2021, you notified the department of an uncontrolled release of treated effluent from the left-hand side facultative pond via authorised release point W4 to Amhurst creek at Farleigh Mill. The uncontrolled release was caused by Cousins Gully flooding during a rainfall event, and inundating the left-hand side facultative pond.
15. On 4 January 2022, you notified the department of an unauthorised release of untreated mill effluent from the Surge Pond at Racecourse Mill to the adjacent wetland, which eventually flows into Small Creek. You estimated that approximately 1,000L was released. The cause of the release was due to a blockage in the underflow detected on 28 December 2021. As a back-up, you utilised a diesel pump to intermittently control the levels in the Surge Pond until a contractor was available to clear the blockage

in the underflow. During this time, the diesel pump was not re-fuelled, causing it to stop pumping, and ultimately permitting the Surge Pond to overflow to the adjacent wetland.

16. On 22 March 2022, you notified the department of a release of effluent from release point W2.0 at the Marian Mill to Perry Creek that did not comply with the minimum DO limit stipulated in Table 3, Condition C2 of the EA, and exceeded the maximum daily release volume measured at W2.1 and as stipulated in Table 2, Condition C2 of the EA due to miscalculation.
17. The maximum daily release volume exceedance is alleged to have occurred from 12am 21 March 2022 to 11:59pm 21 March 2022, whereby you stated that 8.25 ML was released, against a maximum release volume of 3.9ML (or 3,900m³) as stipulated in Table 3, Condition C2 of the EA.
18. On 5 April 2022, you notified the department of molasses allegedly entering the stormwater system at Pleystowe Mill, and being released offsite during a rainfall event.
19. On 29 April 2022, the department approved an EA amendment application for your EA EPPR00423513. The EA amendment permitted the release of effluent from Pond 4 while a surface flow wetland is constructed in Pond 5 at Marian Mill. This resulted in changes to condition C2 of EA EPPR00423513.
20. On 10 June 2022, in response to item (10) above, you submitted an Algae Management Strategy to the department detailing proposed strategies to be implemented at Farleigh and Racecourse Mills to manage algae within the effluent storages.
21. The department undertook a review of the water quality data submitted with the Algae Management Strategy and identified the following:
 - a. Three (3) samples exceeded the limits for TSS stipulated in condition C2 of the EA (30mg/L) for Racecourse Mill during 2021;
 - b. One (1) sample did not meet the minimum DO limit stipulated in condition C2 of the EA (2mg/L) for Racecourse Mill during 2021;
 - c. Two (2) samples exceeded the 80th percentile limit for BOD5 stipulated in condition C2 of the EA (20mg/L) for Farleigh Mill during 2021;
 - d. One (1) sample exceeded the maximum BOD5 limit stipulated in condition C2 of the EA (50mg/L) for Farleigh Mill during 2021; and
 - e. Seven (7) samples exceeded the limits for TSS stipulated in condition C2 of the EA (30mg/L) for Farleigh Mill during 2021.
22. Facts and circumstances numbered 23 to 34 are based on the conditions contained in EA EPPR00423513 effective date of 29 April 2022.
23. On 4 July 2022, you notified the department of an overflow of bagasse runoff from the Bagasse Leachate Pond to an adjacent wetland at Racecourse Mill, which eventually flows into Small Creek. The overflow occurred due to the failure of automatic high-level pump in the Bagasse Leachate Pond which facilitates the transfer of runoff in the Bagasse Leach Pond.
24. On 2 August 2022, you notified the department of an unauthorised release of untreated mill effluent from Pond 1 at the Pleystowe Mill to Bakers Creek. You were trucking untreated mill effluent from Marian Mill ponds to Pleystowe Mill ponds to facilitate the surface flow wetland construction at Marian Mill ponds. As a result of this, water levels in Pond 1 increased. An underground irrigation pipe connected to Pond 1 became submerged in the untreated effluent, permitting a release to Bakers Creek.
25. In response to this, on 10 August 2022, the department issued an EPO to you, requiring you to immediately cease the release of untreated effluent to Bakers Creek, undertake monitoring of the receiving environment, commission a stability assessment of the ponds at Pleystowe Mill by an RPEQ and undertake an assessment of the unauthorised release of untreated effluent from Pond 1 at the Pleystowe Mill to determine if any impacts to the environment occurred.

26. On 22 May 2023, the department finalised the EPO on the basis of the following:
- a. The information provided by you in a written response provided on 11 May 2023 via email which detailed your intent to decommission and rehabilitate Pond 1a and 1b at Pleystowe Mill.
 - b. If you do not decommission Pond 1a and 1b, you must ensure that all recommendations made by the AQP in the structural stability assessment are implemented/completed.
 - c. Failure to do so may result in an escalated enforcement response in accordance with the department's enforcement guidelines.
27. On 3 August 2022, you notified the department of an unauthorised release of contaminants (maceration water) via the stormwater system at Marian Mill to the Pioneer River. You stated that the unauthorised release occurred due to condensate liquids entraining through the maceration tank vent into the stormwater system. You estimated that 2,000L of maceration water was released to the Pioneer River via the Gaytons Gully stormwater drain due to insufficient controls and mitigation measures in place to prevent contaminated water from entering the receiving environment.
28. On 16 August 2022, you notified the department of a release of effluent from Farleigh Mill release point W4 on 3 August 2022 that contained a TSS concentration of 90mg/L, exceeding the 80th percentile concentration limit of 30mg/L.
29. On 21 September 2022, you notified the department of a release of effluent from Marian Mill release point W2.0 with an ammonia concentration of 1.3mg/L, exceeding the maximum ammonia limit of 0.9mg/L. You also undertook sampling at release point W2.1 (Pond 4) which identified an ammonia concentration of 0.07mg/L (which is below the EA limit and can therefore be attributed to the exceedance unlikely being caused by you). However, it is alleged that you failed to undertake sampling within 24 hours of a release commencing as per condition C2, Table 3 of EA EPPR00423513.
30. On 11 October 2022, you notified the department of a release of effluent from Racecourse Mill release point W1 with a TSS concentration of 111mg/L, exceeding the maximum concentration limit of 90mg/L.
31. On 14 October 2022, you notified the department of a release of effluent from Marian Mill release point W2.0 with an ammonia concentration of 1.7mg/L, exceeding the maximum ammonia limit of 0.9mg/L.
32. It is also alleged that you failed to notify the department within 24 hours of becoming aware of the above ammonia exceedance, which is an alleged contravention of condition A3 of EA EPPR00423513.
33. On 9 November 2022, you notified the department of a release of effluent from Racecourse Mill release point W1 with a TSS concentration of 57 mg/L, exceeding the 80th percentile concentration limit of 30mg/L.
34. On 29 November 2022 you notified the department of a release of effluent from Pleystowe Mill release point W3 with a TSS concentration of 59 mg/L, exceeding the 80th percentile release limit of 30 mg/L. In the final report submitted in accordance with condition A4 of EA EPPR00423513 in relation to this release, the following was identified:
- a. During the period 7 – 12 October 2022, 6.73ML of effluent was released from the release point W3, however no samples were taken for laboratory analysis due to the absence of key laboratory staff, and remaining laboratory staff not being aware of the requirement to sample prior to releasing. In-situ measurements were undertaken (DO, pH, EC, temperature).
 - b. During the period 23 – 29 November 2022, 0.7ML of effluent was released with a sample taken on 23 November 2022 exceeding the TSS 80th percentile limit (concentration of 41mg/L, exceeding 30mg/L). This was not notified to the department.
 - c. On 6 January 2023, MSL provided the final report required by condition A4 of EA EPPR00423513. The final report was required to be provided within 10 business days (i.e., was due by 13 December 2022 as the monitoring results were reported to MSL from the NATA laboratory on 28 November 2022, and notified to the department on 29 November 2022 which is

the latter). Therefore, MSL provided the final report required by condition A4 of the EA (taking into consideration the definition of business days as per the Act) 5 business days late.

35. On 17 January 2023, the department amended your EA by agreement pursuant to section 215 of the Act. The EA amendment was administrative in nature and included amending conditions C2 and C3 of the EA to allow for more clarity in the condition interpretation.
36. Condition C1 of EA EPPR00423513 states that other than as permitted within EA EPPR00423513, contaminants must not be released to any waters.
37. Condition C2 of EA EPPR00423513 permits the release of contaminants in accordance with the release limits stated in Table 3 at the authorised release locations stated in Table 2.
38. Waters is defined in EA EPPR00423513 as to include river, stream, lake, lagoon, pond, swamp, wetland, unconfined surface water, unconfined water, natural or artificial watercourse, bed and bank of any waters, dams, non-tidal or tidal waters (including the sea), stormwater channel, stormwater drain, roadside gutter, stormwater run-off, and groundwater and any part thereof.
39. The department considers that the releases occurred to waters as per the definition in EA EPPR00423513.
40. The releases detailed in the facts and circumstances above were not in compliance with condition C1 of EA EPPR00423513.
41. Condition C2 of EA EPPR00423513 requires you to undertake monitoring of the parameters listed and at the monitoring locations and frequencies listed in Table 2.
42. It is alleged that you are failing to undertake monitoring of the required parameters are the monitoring frequencies specified in Table 2, Condition C2 of EA EPPR00423513.
43. Condition A3 of EA EPPR00423513 requires you to notify the department of any incident, breach or receipt of monitoring results not in accordance with a condition of the EA, and the notification must be made as soon as practicable but within 24 hours.
44. The notifications detailed in the facts and circumstances were not in accordance with condition A3 of EA EPPR00423513
45. Condition A8 of EA EPPR00423513 states that the activity must be undertaken in accordance with written procedures that:
 1. Identify potential risks to the environment from the activity during routine operations, closure and an emergency; and
 2. Establish and maintain control measures that minimise the potential for environmental harm; and
 3. Ensure plant, equipment and measures are maintained in a proper and effective condition; and
 4. Ensure plant, equipment and measures are operated in a proper and effective manner; and
 5. Ensure that staff are trained and aware of their obligations under the *Environmental Protection Act 1994*; and
 6. Ensure that reviews of environmental performance are undertaken at least annually.
46. The department alleges that you have failed to undertake the activity in accordance with written procedures are required by condition A8 of EA EPPR00423513.
47. Therefore, the department alleges that you are not in compliance with condition C1, C2, A3 and A8 of the EA.
48. The department considers that the cause of the breaches of condition C1, C2, A3 and A8 of EA EPPR00423513 needs to be remedied.

49. The department considers that you have failed to take all reasonable and practicable measures to minimise the risk of environmental harm in relation to effluent and stormwater management (the general environmental duty).
50. It is evident that there are systemic issues associated with the management of untreated and treated effluent and stormwater at the premises' as well as the development and implementation of written procedures that needs to be addressed.

B. Requirements

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

Notification requirements

1. You must notify the department via email (CWES_Mackay@des.qld.gov.au) within 24 hours of becoming aware of any non-compliance with the requirements of this Notice.

Effluent management

2. By **7 August 2023**, you must commission an **appropriately qualified person (AQP)** to undertake an assessment of the current effluent management system (treated and untreated) (the effluent management system assessment) at the premises'.
3. The effluent management system assessment must:
 - a) Determine if the infrastructure of the current effluent management system (treated and untreated) is effective in ensuring compliance with the EA at each of the premises';
 - b) Determine if the effluent management system is effective in managing actual and potential environmental risk (i.e. impacts to receiving environment) resulting from effluent management (treated and untreated) associated with the sugar milling activities at each of the premises';
 - c) Audit written procedures to determine if they comply with condition A8 of the EA;
 - d) Identify any new management measures (including upgrade or replacement of infrastructure) or changes to the current effluent management measures to remedy non-compliances, reduce environmental risk and ensure compliance with the EA.
 - e) Establish a framework which assesses how effective the new management measures are in remedying non-compliances, reducing environmental risk and ensuring compliance with the EA. Allocate a priority rating for each new measure to inform the implementation plan and schedule of works.
4. By **7 August 2023**, you must commission an **AQP** to develop a water balance model for each of the premises'.
5. The water balance model must:
 - a) Include an assessment of all input streams (waste streams), storages and outputs (including re-use activities).
 - b) Identify volumes of all effluent input streams and outputs on a weekly and yearly basis.
 - c) Be based on actual rainfall data for each premises' (from the nearest Bureau of Meteorology rainfall gauging station or site-specific rainfall data);
 - d) Include an assessment under different hydraulic flow events (wet and dry seasonal events) to determine if the current separation, storage and handling of untreated and treated effluent is appropriate;

6. By **7 August 2023**, you must commission an **AQP** to conduct an investigation into the re-use and reduction options (re-use and reduction investigation) for untreated effluent produced at the premises’.
7. The re-use and reduction investigation must include the following:
 - a) An assessment of all possible re-use and reduction options available; and
 - b) Identification of management measures (including infrastructure) or changes to the current management measures associated with untreated effluent to be implemented to reduce or re-use or reduce the generation of untreated effluent at the premises’.
8. By **7 May 2024**, you must install flow meters as determined by an **AQP** and in accordance with any relevant Australian Standard (AS) and International Organisational Standardisations (ISO) to monitor the total daily volume of effluent being released from the following release points as defined in the EA:
 - a) W1 (lat/long -21.2093; 149.1065 GDA94)
 - b) W2.1 (lat/long -21.1771; 148.9543 GDA94) (W2 from 30 May 2024 as per EA dated 17 January 2023)
 - c) W3 (lat/long -21.1554; 149.0395 GDA94)
 - d) W4 (lat/long -21.0988; 149.0920 GDA94)
9. You must complete all of the tasks contained within the documents titled ‘*22021: RAC Schedule of Work – Algae Management Strategy*’ (Racecourse Mill) and ‘*22021: FAR Schedule of Work – Algae Management Strategy*’ (Farleigh Mill) by **Monday 1 July 2024**.
10. Based on the outcome of requirements (2), (3), (4), (5), (6), (7), (8) and (9) you must update all written procedures required by condition A8 of the EA.
11. By **5pm 20 September 2024**, you must submit a report which includes:
 - a) The results of the effluent management system assessment, water balance model, the re-use and reduction investigation and completing of schedule of works regarding algae management as required by requirements (2), (4), (6) and (9).
 - b) A program of works with measurable and achievable timeframes which addresses each of the effluent management measures required to be implemented as a result of the outcome of requirements (2), (4) and (6) and (9) to achieve compliance with the EA.
 - c) A copy of the updated written procedures requirement by requirement (10).

Stormwater management

Monitoring

12. By **10 November 2023**, an **AQP** must develop, and you must implement a Stormwater Monitoring and Characterisation Program for each of the premises’.
13. The Stormwater Monitoring and Characterisation Program must:
 - a) Include a plan detailing the location of each stormwater discharge monitoring point and related catchment area for each of the premises’; and
 - b) Identify all potential contaminants associated with the environmentally relevant activities at each of the premises’; and
 - c) Specify which parameters will be monitored at each stormwater discharge point from the premises’ as a result of the outcome of item (b); and

- d) Set out the proposed monitoring frequency and duration for each parameter at each stormwater discharge point (**minimum of 12 months' of data is required**); and
 - e) Provide justification for selection of the monitoring parameters and monitoring frequency at each stormwater discharge point, based on previously identified stormwater contaminants throughout the premises; and
 - f) Include flow volume information from each stormwater discharge point at the premises'; and
 - g) A description of how the flow volume is derived for each stormwater discharge point; and
 - h) Specify that all laboratory analysis must be undertaken by a laboratory with National Association of Testing Authorities (NATA) accreditation; and
 - i) Provide details of the proposed stormwater monitoring methodology to demonstrate compliance with the methods prescribed in the latest version of '*Queensland Monitoring and Sampling Manual*' (DES, June 2018); and
 - j) Analyse results against relevant ANZG (2018) trigger values and the Environmental Protection Policy (Water and Wetland Biodiversity) Policy 2019 for the Pioneer River and Plane Creek Basins (updated in 2022); and
 - k) Analyse trends in available monitoring data; and
 - l) Include raw data provided in electronic excel format.
14. By **5pm 29 November 2023** you must submit a copy of the Stormwater Monitoring and Characterisation Program to CWES_Mackay@des.qld.gov.au.

Measures and infrastructure

15. By **2 August 2024**, you must commission an **AQP** to undertake an assessment of the current stormwater management measures and infrastructure (stormwater management measures and infrastructure assessment) at each of the premises'.
16. The stormwater management measures and infrastructure assessment must:
- a) Consider the outcome of the implementation of the Stormwater Characterisation and Monitoring Program; and
 - b) Include a review of the current stormwater management measures and infrastructure at each of the premises' to determine its effectiveness in ensuring the separation and management of clean and dirty stormwater; and
 - c) Determine its effectiveness in managing actual and potential environmental impacts resulting from ineffective stormwater management associated with the sugar milling activities at each of the premises'; and
 - d) Audit written procedures associated with stormwater measures and infrastructure to determine if they meet requirements under condition A8 of the EA; and
 - e) Determine any new management measures (including infrastructure) or changes to the current stormwater management measures required to ensure compliance with the EA.
17. Based on the outcome of requirement (16) you must update all written procedures required by condition A8 of the EA.
18. By **5pm 4 April 2025**, you must submit a report which includes the following:

- a) The outcome of the stormwater management measures and infrastructure assessment undertaken as required by requirement (16) and (17).
- b) A program of works with measurable and achievable timeframes which addresses each of the stormwater management measures required to be implemented to achieve compliance with the EA.
- c) A copy of the updated written procedures required by requirement (17).

Written procedures for compliance reporting and compliance monitoring

19. By **6 October 2023**, you must commission an **AQP** to undertake a review of all written procedures for compliance reporting and compliance monitoring required under EA EPPR00423513 (dated 17 January 2023) at each of the premises'.
20. The **AQP** review of the written procedures must:
- a) Determine the written procedures effectiveness in ensuring all incidents and non-compliances of the EA are reported to the department in accordance with condition A3 of the EA, and that all compliance monitoring is carried out in accordance with condition C2 of the EA;
 - b) Determine if the written procedures are effectively implemented by you;
 - c) Identify any gaps associated with the written procedures and implementation of the written procedures; and
 - d) Provide a list of recommendations for implementation by you.
21. By **25 April 2024**, you must implement any recommendations made by the **AQP** to ensure all incidents and non-compliances are reported in accordance with condition A3 EA EPPR00423513, and that all compliance monitoring is undertaken in accordance with the requirement of condition C2 of the EA.
22. By **5pm 26 April 2024**, you must submit a report to CWES_Mackay@des.qld.gov.au which details the results of requirements (20) and (21).

Progress reports

23. You must submit progress reports in accordance with the timeframes and content requirements stipulated in **Table 1 – Progress report submission requirements**.

Guidance only: Each progress report is to be provided as a continuous, living report which contains updates to the previous progress report.

24. The progress reports must be submitted to CWES_Mackay@des.qld.gov.au.

Table 1 Progress report submission requirements

Report no.	Due date	Report content requirements
1	5pm 30 June 2023	1. Status of engagement with AQP/s for the effluent management system assessment. 2. Status of engagement with AQP/s for the water balance models for each premises. 3. Status of engagement with the AQP/s for the re-use and reduction options investigation.

		4. Status of engagement with the AQP/s for the flow meter installations. 5. Status of the algae management strategy implementation. 6. Status of engagement with AQP/s for the Stormwater Monitoring and Characterisation Program. 7. Status of the engagement with AQP/s to review written procedures for compliance reporting and compliance monitoring.
2	5pm 29 September 2023	1. Confirmation that all AQPs for the effluent management system assessment, the water balance models, the re-use and reduction investigation have been commissioned and the projects have commenced. 2. Status of engagement with the AQP/s for the flow meter installations. 3. Status of the algae management strategy implementation. 4. Status of engagement with AQP/s for the Stormwater Monitoring and Characterisation Program. 5. Status of the engagement with AQP/s to review written procedures for compliance reporting and compliance monitoring.
4	5pm 31 March 2024	1. Status of progress on the effluent management system assessment, water balance model and re-use and reduction options investigation. 2. Status of the implementation of the Stormwater Monitoring and Characterisation Program. 3. Status of engagement with AQP for the stormwater management measures and infrastructure assessment. 4. Status of flow meter installations. 5. Status of the algae management strategy implementation. 6. Status of review of the written procedures for compliance reporting and compliance monitoring.
6	5pm 30 September 2024	1. Status of the stormwater management measures and infrastructure assessment.
7	5pm 3 March 2025	1. Status of the stormwater management measures and infrastructure assessment.

Final report

25. By **5pm 2 May 2025**, you must submit a final report to the department detailing how you have achieved compliance with requirement (1) to (26) of this Notice.

26. The report required by requirement (24) must be submitted to CWES_Mackay@des.qld.gov.au.

Definitions

Appropriately qualified person (AQP) 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 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 \$898,437.50 or five years imprisonment for an individual or \$4,492,187.50 for a corporation.
- The maximum penalty for contravening an EPO is 4500 penalty units, totalling \$646,875.00 for an individual or \$3,324,375.00 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 \$7,187.50, for an individual or \$35,937.50 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 \$7,187.50, for an individual or \$35,937.50 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.

Should you have any queries in relation to the notice, please contact Naomi Camilleri, Team Leader on telephone number (07) 4999 6888 or via CWES_Mackay@des.qld.gov.au.



Signature

Kate Grayson
Manager Compliance
Delegate of the Chief Executive
Department of Environment and Science
Environmental Protection Act 1994

31/05/2023

Date

Compliance Centre: **Mackay**
Mail: PO Box 2001 MACKAY QLD 4740
Email: CWES_Mackay@des.qld.gov.au
Ph: (07) 4999 6861

