

ENFORCEABLE UNDERTAKING

The commitments in this undertaking are offered to the Environment Protection Authority by:

Central Highlands Region Water Corporation
of 7 Learmonth Road, Wendouree, Victoria 3355

DATE 17 April 2025

DEFINITIONS

1. In this Undertaking:
 - 1.1. the **Act** means the *Environment Protection Act 2017* (Vic);
 - 1.2. **Auditor** means an auditor appointed pursuant to Part 8.3 of the Act;
 - 1.3. the **Corporation** means the Central Highlands Region Water Corporation;
 - 1.4. the **EPA** means the Environment Protection Authority;
 - 1.5. the **Licence** means amalgamated licence 74422 issued to the Corporation under the *Environment Protection Act 1970* (Vic) (repealed) and the transitional provisions of the Act, and amended on 14 April 2023 to operating licence OL000072299;
 - 1.6. the **BNR** means biological nutrient removal;
 - 1.7. **District** means the sewerage district, water supply district and irrigation district, if any, determined by the Minister for the Corporation under the *Water Act 1989* (Vic) for which the Corporation is responsible for the provision of essential services; and
 - 1.8. the **Undertaking** means this enforceable undertaking offered by the Corporation and accepted by the EPA pursuant to section 300 of the Act.

BACKGROUND

EPA's role

2. The EPA is a statutory body created by the Act, which has primary responsibility for the administration and enforcement of that Act. The objective of the EPA is to protect human health and the environment by reducing the harmful effects of pollution and waste.

Details of incident

3. The Corporation operates the Ballarat South Wastewater Treatment Plant to provide the essential service (sewerage) to an equivalent population of approximately 100,000 people within the District. The plant operates in compliance with the Licence allowing the release of tertiary treated effluent to the Yarrowee River.
4. In February and March 2023, the Corporation released treated effluent from the Ballarat South Wastewater Treatment Plant to the Yarrowee River during disruption to the normal operation of the plant.
5. During this period the sewerage system delivered an inflow to the Ballarat South Wastewater Treatment Plant of approximately 19 megalitres a day.

6. Preliminary, primary, secondary and tertiary treatment processes and technology was applied at the Ballarat South Wastewater Treatment Plant to the inflow.
7. Failures of the two solids belt filter presses diverted resources from the normal operation of the Ballarat South Wastewater Treatment Plant in late February 2023. Concurrently, two oxygen analysers recorded abnormal readings, which, through the program logic of the biological nutrient removal (BNR) process control automation, impacted the treatment process, in particular, through impacts on blower output. The abnormal readings of the oxygen analysers was attributed to the self-cleaning mechanism failing and causing a continuous air stream to flow over the oxygen analysers, recording a false high reading that was not representative of the process state.
8. Operators worked to restore the normal operation of each belt filter press, and this was reinstated by 5 March 2023.
9. Disruption to the normal operation of the plant allowed the release of tertiary treated effluent with elevated nutrients to the Yarrowee River, while remaining in compliance with the Licence.
10. The Corporation:
 - 10.1. released tertiary treated effluent from the Ballarat South Wastewater Treatment Plant to the Yarrowee River during a period when the plant operation was disrupted commencing from around 27 February 2023;
 - 10.2. voluntarily adopted the annual median discharge limits as maximums until normal operations were reinstated;
 - 10.3. notified government stakeholders and the community at large of the disruption of the Ballarat South Wastewater Treatment Plant on 14 March 2023 with periodic updates until normal operations were restored; and
 - 10.4. implemented water quality monitoring of the treated effluent and the environmental flow in the Yarrowee River.
11. Water quality results recorded from the Yarrowee River downstream of the Ballarat South Wastewater Treatment Plant recorded elevated ammonia concentrations proximate to the discharge point.
12. On 14 March 2023 the Corporation notified the EPA of a pollution incident and on 22 March 2023 returned the notifiable incident form to the EPA.
13. On 15 March 2023 an EPA officer issued prohibition notice PN-00004340 that required cessation of any release of treated effluent from the Ballarat South Wastewater Treatment Plant to the Yarrowee River until ammonia concentrations of 2mg/l or less were restored.
14. On 31 March 2023 EPA officers inspected the Ballarat South Wastewater Treatment Plant and the Yarrowee River to assess compliance with the prohibition notice. Entry Report FAR-00010118 recorded that compliance was achieved and EPA officers would continue to monitor compliance with prohibition notice PN-00004340.
15. On 12 April 2023 an EPA officer issued prohibition notice PN-00004515 that imposed a temporary maximum discharge limit for ammonia, and required investigation of the cause of the incident and preparation of a report.
16. The Corporation complied with the prohibition notice, and produced a report identifying the matters at paragraph 7 of the Undertaking. The EPA revoked the notice.

17. The Corporation voluntarily brought forward significant investment, which was approved by the Essential Services Commission, to upgrade the Ballarat South Wastewater Treatment Plant, including:
 - 17.1. dewatering renewal and change from belt press to centrifuge (approximately \$4.6 million over 2023-2025); and
 - 17.2. biological nutrient reactor aeration upgrade (approximately \$1.7 million over 2024-2028).
18. The upgrade works to the Ballarat South Wastewater Treatment Plant have commenced.
19. In addition, the Corporation has provided additional resourcing to assist with management of wastewater treatment operations for Ballarat.

Alleged Contraventions

20. Between 22 February 2023 and 5 March 2023, the Corporation, acted contrary to the general environment duty by:
 - 20.1. failing to maintain oxygen analysers in a manner that minimised the risks of harm to the environment; and
 - 20.2. failing to provide adequate information, instruction or training to its personnel to identify the error in the function of the oxygen analysers delaying reinstatement of function and use.

KEY OBJECTIVES OF THIS UNDERTAKING

21. This Undertaking is a binding agreement that aims to:
 - 21.1. improve the Corporation's environmental performance;
 - 21.2. update the Corporation's operating procedures and management systems for operating all wastewater treatment plants owned and operated by the Corporation to prevent a reoccurrence;
 - 21.3. deliver benefits to the environment and local community; and
 - 21.4. drive improvements in environmental performance across the water industry.

UNDERTAKINGS

22. In accordance with section 300 of the Act and acknowledging the alleged contraventions at paragraph 20, the Corporation has offered, and the EPA has accepted, the undertakings in paragraphs 23 to 34 of this Undertaking, as an alternative to Court proceedings.

Improve the Corporation's environmental performance

23. The Corporation undertakes to:
 - 23.1. engage a suitably qualified professional(s) with experience assessing and evaluating wastewater treatment plant BNR design, operation, maintenance and controls;
 - 23.2. use the professional engaged in compliance with paragraph 23.1 to complete a risk assessment of BNR processes at all of the Corporation's BNR wastewater treatment plants;

- 23.3. use the outcomes from the work completed in compliance with paragraph 23.1 and 23.2 to reduce the risk of BNR process failure causing risk of harm to the environment from treated effluent;
- 23.4. provide to the EPA a copy of the risk assessment prepared in compliance with paragraph 23.2;
- 23.5. modify the Ballarat South Wastewater Treatment Plant to:
 - 23.5.1. upgrade flow control to improve balancing of effluent flows through the aeration chambers; and
 - 23.5.2. install additional independent oxygen analysers in each of the three primary aeration chambers reducing the risk arising from reliance on a single oxygen analyser; and
- 23.6. provide the EPA with a copy of the report detailing the upgrades implemented in compliance with paragraph 23.5.

The assessments referred to in paragraphs 23.1 to 23.4 must be completed within 12 months of the date of this Undertaking and the upgrades referred to in paragraphs 23.5 must be completed within 12 months of completion of the assessment.

24. The Corporation undertakes to:
 - 24.1. complete a review of its operating procedures, management systems and documentation, including:
 - 24.1.1. standard operating procedures;
 - 24.1.2. asset maintenance plan; and
 - 24.1.3. environmental management system;relating to use, operation and maintenance of oxygen analysers;
 - 24.2. update the Corporation's operating procedures, management systems and documentation relating to use, operation and maintenance of oxygen analysers, identification of projected exceedances, and implementation of contingencies, for all wastewater treatment plants owned and operated by the Corporation, to apply industry best practice; and
 - 24.3. implement training of the Corporation's key personnel (including its management) and contractors relating to the Corporation's operating procedures, management systems and documentation relating to use, operation and maintenance of oxygen analysers, identification of projected exceedances, and implementation of contingencies, for all wastewater treatment plants owned and operated by the Corporation.

The undertakings referred to in paragraphs 24 must be completed within 12 months of the date of this Undertaking.

Benefit to the environment and community

25. The Corporation undertakes to make a monetary contribution of \$100,000 to fund an environmental project external to the Corporation's core business activities which will benefit the community and environment, namely support the Yarrowee Leigh Catchment Group Incorporated A0059105V (or alternative in consultation with the EPA if required) initiative to improve the condition of the Yarrowee River, for a project to be delivered in collaboration with the Wadawurrung Traditional Owners Aboriginal Corporation.

26. The undertakings referred to in paragraphs 25 must be completed within 12 months of the date of this Undertaking.

Improvement in environmental performance industry wide

27. The Corporation undertakes to expend \$20,000 on the following:
- 27.1. research and complete a study of the design, use, maintenance and application of oxygen analysers in program logic of wastewater treatment plant operation;
 - 27.2. perform a presentation for the Victorian water industry detailing the findings and recommendations of the study and research referred to in paragraphs 27.1; and
 - 27.3. submit an article for the publication of the findings of a case study of the work completed pursuant to this Undertaking with the Victorian Water Industry Association Incorporated.
28. The study and research referred to in paragraphs 27.1 must be completed within 12 months of the date of this Undertaking. The presentation and submission for publication referred to in 27.2 and 27.3 must be completed within 6 months of the completion of the research and study (in paragraph 27.1)

Reporting, monitoring and cost of compliance

29. The Corporation undertakes to pay its costs of its compliance with this Undertaking. In addition to the specific costs identified in 25 and 27 above, an estimate of compliance costs has been provided in paragraphs 45 and 46 below.
30. The Corporation undertakes to provide written progress reports every quarter from the date of this Undertaking until the Corporation provides EPA with the Auditor's final assessment report in compliance with paragraph 33. These progress reports will outline:
- 30.1. the Corporation's actions undertaken to implement each undertaking specified in paragraphs 23 to 27;
 - 30.2. actions still to be completed to ensure compliance with the Undertaking; and
 - 30.3. any strategies the Corporation intends to employ to ensure delivery of all undertakings in accordance with the terms of the Undertaking.
31. The Corporation undertakes that it will, publish the written progress reports as outlined in paragraph 30 of this undertaking on it's website in a manner that is timely with completion and provision to the Authority.
32. The Corporation undertakes that it will, within 10 business days, unless otherwise agreed by the EPA, supply to the EPA, on request, all documents and information reasonably requested by EPA from time to time for the purpose of assessing the Corporation's compliance with the terms of this Undertaking.
33. The Corporation undertakes to engage, at its own cost, an Auditor to verify the Corporation's compliance with the terms of the Undertaking and to prepare a 'final compliance report' which outlines each undertaking and provides the Auditor's professional assessment of the Corporation's compliance with the terms of each undertaking.
34. The Corporation undertakes to provide the EPA:
- 34.1. a summary of actual expenditure in complying with this Undertaking and a copy of the Auditor's 'final compliance report' referred to in 33 above within 3 months of completion this Undertaking; and

- 34.2. a written statement from its Managing Director that the Undertaking has been complied with within 3 months of completion of the terms of this Undertaking.

ACKNOWLEDGEMENT

35. The Corporation acknowledges the EPA's allegation at paragraph 20 that the Corporation contravened the Act. The Corporation relied on oxygen analysers to inform programed logic controlling operation of the aeration blowers forming part of the Ballarat South Wastewater Treatment Plant. Performance of the oxygen analysers provided false readings, which caused the malfunction to occur and the release of treated effluent with elevated nutrient concentrations in the discharge to the Yarrowee River. Concurrent with the discharge of treated effluent with elevated nutrients, dead fish were identified in the Yarrowee River proximate to the plant. The Corporation implemented remedial actions to modify systems and procedure to ensure future compliance, resolving the contravention and has commenced implementation of significant capital and operational upgrades to reduce the risk of any future disruption to the normal operation of the Ballarat South Wastewater Treatment Plant.
36. The Corporation acknowledges that the EPA:
- 36.1. may issue a media release on execution of this Undertaking;
 - 36.2. may from time to time publicly refer to this Undertaking; and
 - 36.3. will make this Undertaking available for public inspection on a public register maintained by the EPA under section 455 of the Act.
37. The EPA acknowledges that its acceptance of this Undertaking means that in accordance with section 303 of the Act, while the Undertaking is in force, criminal proceedings may not be commenced against the Corporation for the contravention alleged in paragraph 20 of this Undertaking.
38. The Corporation acknowledges that:
- 38.1. if the Corporation withdraws from this Undertaking before it has been complied with, criminal proceedings may be brought for the offence constituted by the alleged contravention in respect of which the undertaking was given (referenced in paragraph 20 of this Undertaking);
 - 38.2. the EPA's powers are not fettered by this Undertaking and the EPA may commence any other enforcement action against the Corporation in relation to any other alleged contravention of the Act that is not the subject of this Undertaking, whether or not the subsequent contravention or alleged contravention involves the provision of the Act that is referred to in paragraph 20 of this Undertaking;
 - 38.3. this Undertaking in no way derogates from the rights and remedies available to any other person or entity arising from any conduct described in this Undertaking or arising from subsequent conduct; and
 - 38.4. this Undertaking has no operative force until accepted by EPA, and the Corporation and EPA acknowledge that the date of this Undertaking is the date on which it is accepted by EPA.
39. The Corporation agrees that any public reference made by the Corporation to the actions contained within the Undertaking will refer to this Undertaking.

STATEMENT OF REGRET

40. The Corporation regrets its conduct that was contrary to the general environmental duty, by failing to maintain oxygen analysers in a manner that minimised risks of harm to the

environment, through maintaining the quality of effluent released to the Yarrowee River, and failed to provide adequate information, instruction and training to its personnel to enable compliance with the general environmental duty in so far as it related to this incident, in contravention of section 25(4)(a) and (e) of the Act. The Corporation also regrets impacts its conduct had on the Traditional Owner cultural values of the Wadawarrung People.

41. ASSURANCE ABOUT FUTURE BEHAVIOUR

41. The Corporation commits to training its employees, implementing its operating procedures, monitoring its systems and routinely auditing its operations to mitigate the risk of oxygen analysers contributing to any future disruption of all wastewater treatment plants owned and operated by the Corporation.
42. The Corporation commits to implementing the updated operating procedures, management systems and documentation developed in compliance with the Undertaking to prevent a reoccurrence of the contravention.

EFFECT OF NON-COMPLIANCE

43. The Corporation acknowledges that failure to comply with this Undertaking may result in the EPA applying to the Magistrates' Court of Victoria for an enforcement order pursuant to section 301 of the Act.

ADDITIONAL INFORMATION

44. The Corporation declares that the environmental project referred to in paragraph 25 does not include expenditure that has already been planned as a part of the Corporation's budget.
45. The Corporation has committed to the following costs of compliance with this Undertaking:
 - 45.1. \$160,000 improving the Corporation's performance (refer to paragraphs 23 and 24);
 - 45.2. \$100,000 delivering benefit to the environment and the community (refer to paragraph 25); and
 - 45.3. \$20,000 improving the performance of the industry (refer to paragraph 27).
46. In addition, the Corporation has estimated that the cost of completed works for reinstating and upgrading Ballarat South Wastewater Treatment Plant to improve operations, reduce risk of failure and provide additional contingency measures to be approximately \$500,000.
47. The Corporation will reimburse the EPA for external costs and expenses incurred for work conducted by the EPA, including but not limited to analysis, measurement, recording, evaluation, testing and inspection in the amount not more than \$10,000.

TERMINATION OF ENFORCEABLE UNDERTAKING FOR BREACH

48. If the Corporation fails to carry out any of the requirements or obligations agreed to in this Undertaking, the EPA may issue a written notice identifying the breach and requesting that the Corporation take action to remedy the breach by a specified date.
49. If the notice is not complied with, EPA may terminate the Undertaking by written notice to the Corporation. Upon termination, EPA may bring proceedings for the offence constituted by the contravention or alleged contravention in respect of which the Undertaking was given.

CESSATION OF THE ENFORCEABLE UNDERTAKING

50. Upon receipt of:

- 50.1. the Auditor's final compliance report under paragraph 33;
- 50.2. the certification from the Corporation's Managing Director that the terms of the Undertaking have been complied with, under paragraph 34.2; and
- 50.3. the Corporation's summary of costings of compliance expenditure under paragraph 34.1;

the EPA will review the documents, and if satisfied that the terms of the Undertaking have been complied with, the EPA will provide written notification to the Corporation that the Undertaking is no longer in force.

SIGNED for and on behalf of **CENTRAL**)
HIGHLANDS REGION WATER)
CORPORATION (ABN 75 224 340 348) by its)
authorised delegate:



Signature

Jeff Haydon

Name of Delegate

Managing Director

Position

Date: 07 / 04 / 2025

**Accepted by the Environment Protection
Authority under section 300 of the *Environment
Protection Act 2017* by its Chief Executive
Officer:**



**Chief Executive Officer of the Environment
Protection Authority**

Date: 17 / 04 / 2025