



Section 65  
*Environmental Protection Act 1986.*

## ENVIRONMENTAL PROTECTION NOTICE

Reference No: 202503

**Person to whom this Environmental Protection Notice is issued:**

**City of Kalgoorlie Boulder (ABN 63 711 737 609)**

In its capacity as the occupier of the **Premises**

577 Hannan Street

KALGOORLIE WA 6430

In its capacity as the **Occupier** of Celebration Road, SOUTH BOULDER WA 6432, Being portion of Lot 221 on Deposited Plan 217615 and Reserve 42000 of Certificate of Title Volume LR3098 Folio 969 as depicted in **Appendix 2**.

**PREMISES TO WHICH THIS ENVIRONMENTAL PROTECTION NOTICE RELATES (the Premises):**

The **Premises** the subject of this Environmental Protection Notice (**Notice**) is situated at:

South Boulder Wastewater Treatment Plant

Celebration Road

SOUTH BOULDER WA 6432

Being portion of Lot 221 on Deposited Plan 217615 and Reserve 42000

Certificate of Title Volume LR3098 Folio 969.

**Reasons for which this Environmental Protection Notice is issued:**

This **Notice** is given to the **Occupier** being the City of Kalgoorlie Boulder responsible for the South Boulder Wastewater Treatment Plan under section 65 of the *Environmental Protection Act 1986* (WA) (EP Act) because I have reasonable grounds to suspect there is, or is likely to be an emission or emissions from the **Premises** and that the emissions have caused or are likely to cause pollution.

The nature of the suspected pollution is:

- 1) The emission of odour from the **Premises** into the environment. I have reason to believe that the pollution that is or is likely to be caused is the direct or indirect alteration of the environment to the detriment of and environmental value. The relevant environmental value is the beneficial use of the portion of the environment (air quality) that is conducive to public amenity, public health and aesthetic enjoyment of the environment surrounding residential premises.
- 2) The discharge of wastewater to Hannan Lake. I have reason to believe that the pollution that is or is likely to be caused is the direct or indirect alteration of the environment to the detriment of an environmental value. The relevant environmental value is the beneficial use of the portion of the environment, namely, public health and safety and public amenity.

Therefore, this **Notice** has been given to require the **Occupier** to take measures to prevent, control and abate the pollution; and to investigate the extent and nature of the environmental harm and its consequences; and to report to the department on actions to comply with the requirements.

I am satisfied that because **City of Kalgoorlie Boulder** is the **Occupier** of the **Premises** from which odour emissions and wastewater emissions have occurred, that you are the appropriate **Person** to whom to give this **Notice**.

#### Requirements of this Notice:

1. Within 21 days, the **Person** to whom this **Notice** is given must provide a comprehensive **Hannan Lake Discharge Plan** outlining the measures to be taken to cease the discharge of wastewater from the **Premises** to Hannan Lake within 3 weeks of the plan being approved. The plan must detail the steps and timeline for the implementation and be submitted to the **CEO** for approval.
2. The CEO may direct the **Person** to whom this **Notice** is given to amend the **Hannan Lake Discharge Plan** if the **CEO** considers that the Plan to cease the discharge is insufficient to meet the requirements outlined in **Requirement 1 of this Notice**.
3. Within 5 days of the **Hannan Lake Discharge Plan** being approved by the **CEO** the **Hannan Lake Discharge Plan** must be implemented.
4. Within 7 days, the **Person** to whom this **Notice** is given must engage a **suitably qualified and experienced wastewater expert** to undertake an assessment and prepare a **Wastewater Management Report** detailing the following:
  - a) Intermittent Decant Extended Aeration (IDEA) Plant
    - i. The current condition of the IDEA plant, the anoxic treatment aeration tank, intermittent aeration tank, balance tank, chlorination dosing tank; and
    - ii. Timeframes to reinstate the IDEA activated sludge plant, the anoxic treatment aeration tank, intermittent aeration tank, balance tank and the chlorination dosing tank at the **Premises** within 12 months, to meet compliance with the site infrastructure requirements specified in **Appendix 3**; and
    - iii. The recommended treatment process(es) and equipment required to achieve wastewater treatment parameters to meet compliance with **Table 1**; and

**Table 1: Wastewater treatment parameters**

Monitoring point	Parameter	Limit (including units)	Frequency
Monitoring Point as shown on the map in Appendix 2	Faecal Coliforms <sup>1</sup>	<1000 CFU/100ml	Median of 5 consecutive samples daily spot sample when discharging
	pH <sup>2</sup>	>6 <9	Daily spot sample at discharge point
	Biological Oxygen Demand (BOD <sub>5</sub> )	<15 mg/L	
	Total Suspended Solids (TSS)	<40 mg/L	

	Total Recoverable Hydrocarbons	10 mg/L	
	Oil and Grease	10 mg/L	

Note 1: Actual units are to be reported except where the result is greater than the highest detectable level of 24,000 cfu/100mL. In this case the reporting of the highest detectable level is permitted.

Note 2: Infield non-NATA Accredited analysis also permitted.

- iv. Recommended improvements to wastewater treatment processes, monitoring, infrastructure and equipment to improve performance of the wastewater treatment plant; and
  - v. The wastewater treatment processes in place to ensure the effective treatment of wastewater to the required treatment specifications while the IDEA plant is offline.
- b) Water Balance
- i. A water balance that sets out the wastewater treatment and storage capacity at the Premises and at the offsite holding ponds (namely, Old Boulder Holding Ponds, Racecourse Dam Holding Ponds, Swan Lake Holding Ponds, Piccadilly Twin Dams, Golf Course Dam and Stormwater Combined Dam) at the locations specified in **Appendix 4**.
- c) Environmental and human health risk
- i. An assessment that details each current unacceptable risk and/or hazard(s) to human health and the environment via discharge of wastewater from Pond 3 to each receiving environment.
- d) Seepage assessments
- i. A seepage assessment for each pond and lagoon at the Premises as shown on the map in Appendix 2, utilising the methodology specified by **Ham and Baum, 2009** and the 'pond drop test' specified in **Practice Note 21: Farm Dairy Effluent Ponds**; and
  - ii. A seepage assessment for the Old Boulder Holding Ponds, Racecourse Dam Holding Ponds, Swan Lake Holding Ponds, Piccadilly Twin Dams and Golf Course Dam located off the Premises, as shown on the map in **Appendix B** utilising the methodology specified by **Ham and Baum, 2009** and the 'pond drop test' specified in **Practice Note 21: Farm Dairy Effluent Ponds**.
- e) Within 90 calendar days, the **Person** to whom this **Notice** is given must provide to the **CEO** a final copy of the Wastewater Management Report in Portable Document Format (PDF) and commence implementing the recommendations made by the suitably qualified and experienced wastewater expert via the Wastewater Management Report.
5. Within 5 calendar days, the **Person** to whom this **Notice** is given must ensure at least 1.2 meters of liquid is maintained above the sludge within Lagoons 1A and 1B at all times.
6. Within 7 calendar days, the **Person** to whom this **Notice** is given must commence adding ferric chloride into the inlet pipe of Lagoons 1A and 1B until the 30 August 2025, to maintain a concentration of 40mg/L in the incoming waste.
7. By close of business on the day of receiving this **Notice**, the **Person** to whom this **Notice** is given must cease discharging floating debris from any of the lagoons or ponds at the **Premises** as shown on the map in **Appendix 2**.

8. The **Person** to whom this **Notice** is given must ensure all floating debris removed from any of the lagoons or ponds at the **Premises**, as shown on the map in **Appendix 2**, is placed into a sealed container and removed to a premises licensed to accept the waste, within 7 calendar days of the debris being removed.
9. By 29 August 2025, the **Person** to whom this **Notice** is given must install the dual band screens to ensure solids are separated and removed from wastewater prior to any wastewater treatment.
10. By 29 August 2025, the **Person** to whom this **Notice** is given must install a Magflow meter located at the inlet pipe to ensure accurate and continual inflow is measured for both sewerage and septage waste accepted at the **Premises**.
11. By 8 September 2025, the **Person** to whom this **Notice** is given must provide evidence to the **CEO** that **Requirements 9 and 10** have been achieved.
12. By 30 September 2025, the **Person** to whom this **Notice** is given must commence desludging of Lagoon 1B and upon completion of desludging Lagoon 1B commence desludging Lagoon 1A via a **hydraulic dredging unit** to prevent damage to the integrity of the liner within those ponds.
13. The **Person** to whom this **Notice** is given must ensure sludge material from Lagoons 1A and 1B is only pumped into **geotextile tubes** with containment infrastructure to prevent emissions of leachate into the environment, during desludging operations required by **Requirement 12**.
14. The **Person** to whom this **Notice** is given must ensure leachate from desludging Lagoon 1A and 1B is pumped back to Lagoon 1A or 1B, during desludging operations required by **Requirement 12**.
15. By 30 April 2026, the **Person** to whom this **Notice** is given must ensure the desludging of Lagoons 1A and 1B has been completed and provide a bathymetric survey of Lagoons 1A and 1B demonstrating sludge has been removed from both ponds.
16. Within 14 days of removing the sludge from the **Premises**, the **Person** to whom this **Notice** is given must provide the following information to the **CEO**:
  - (a) A copy of the laboratory analysis accompanying the sludge material from Lagoons 1A and 1B to its disposal location; and
  - (b) Receipt(s) for all sludge removed from the Premises.
17. Within 30 calendar days, the **Person** to whom this **Notice** is given must provide a **SBWWTP Management Plan** to the **CEO** for approval outlining how wastewater is proposed to be managed at the **Premises** for up to **18 months** from the date of receiving this **Notice**, by adopting one or a combination of the following options specified below:
  - a) Removal and transfer of wastewater off the **Premises** to a wastewater treatment facility licensed to take septage and sewerage; including:
    - i. The licence number and details of the nominated waste facility to take the liquid waste; and
    - ii. Written confirmation from that facility they have capacity to take that waste, if option 15 a) is selected; and/or
  - b) Installation of enclosed containment infrastructure at the **Premises** capable of retaining wastewater that prevents emissions of leachate into the environment prior to treatment of that wastewater; and

- i. If installing enclosed containment infrastructure all solid material must be removed from the wastewater prior to discharging into the enclosed containment infrastructure for removal from the **Premises** to a licensed landfill authorised to take the waste within 7 days of removal; and
    - ii. Details of the specifications and capacity of the enclosed containment infrastructure; and
    - iii. Proposed location of the enclosed containment infrastructure; and/or
  - c) Installation of treatment infrastructure / equipment capable of treating wastewater to required treatment specifications; and
    - i. Details of the nominated treatment infrastructure / equipment; and
    - ii. Capacity of the treatment infrastructure / equipment; and
    - iii. Treatment specifications.
18. The **Person** to whom this **Notice** is given must implement the **SBWWTP Management Plan** in accordance with the written approval from the **CEO**.
19. Within 2 calendar days, the **Person** to whom this **Notice** is given must measure and record the wastewater parameters specified in **Table 2** at the concrete wet well located at Pond 3, as shown on the Map in **Appendix 2**.

**Table 2: Monitoring of wastewater**

Monitoring point	Parameter	Units	Frequency
Measuring device at inlet pipe	Volumetric flow rate	m <sup>3</sup>	Continuous/ daily reading
Measuring device at outlet pipe to Locations Hannan Lake, Industry Reuse and or Old Boulder Holding Ponds	Volumetric flow rate	m <sup>3</sup>	Continuous/ daily reading
	pH (field) <sup>2</sup>		Daily spot sample
	Electrical conductivity <sup>2</sup>	µS/cm	
	Temperature	°C	
	Redox potential	Eh	Monthly spot sample
	Faecal Coliforms <sup>1</sup>	CFU/100ml	
	Escherichia coli		
	Enterococci		
	Biological Oxygen Demand (BOD <sub>5</sub> )	mg/L	
	Total Suspended Solids (TSS)		
	Total Dissolved Solids		
	Total Nitrogen		
	Ammonium (NH <sub>4</sub> -N)		
	Ammonium-Nitrogen		
	Nitrate + Nitrite-Nitrogen		
	Reactive phosphorus		
	Total Phosphorus		
	Total Metals (aluminium, arsenic, cadmium, chromium, cobalt, copper, lead,		

	manganese, nickel, potassium, zinc)		
	Total Recoverable Hydrocarbons		
	Oil and Grease		

Note 1: Actual units are to be reported except where the result is greater than the highest detectable level of 24,000 cfu/100mL. In this case the reporting of the highest detectable level is permitted.

Note 2: Infield non-NATA Accredited analysis also permitted.

20. Within 2 calendar days, the **Person** to whom this **Notice** is given must keep records demonstrating:

- a) all water samples are collected and preserved in accordance with AS/NZS 5667.1; and
- b) all wastewater sampling is conducted in accordance with AS/NZS 5667.10;
- c) all surface water sampling is conducted in accordance with AS/NZS 5667.9 as relevant; and
- d) all microbiological samples are collected and preserved in accordance with AS/NZS 2031; and
- e) all laboratory samples are submitted to and tested by a laboratory with current NATA accreditation for the parameters being measured unless indicated otherwise in the relevant table.

21. Within 30 calendar days, the **Person** to whom this **Notice** is given must commence reporting to the **CEO** the monitoring and records required by **Requirements 19 and 20** on an ongoing monthly basis.

22. All timeframes required by this Notice remain unchanged from the original date this Notice was given on 9 July 2025.

The requirements and timeframes stipulated in this **Notice** may be amended by an **Inspector or Authorised Person** in writing on application by the **City of Kalgoorlie Boulder** or their authorised representative, with reasonable justification and supporting evidence.



Ruth Dowd  
Executive Director, Assurance  
Department of Water and Environmental Regulation

**for the Chief Executive Officer  
under Delegation No. 143 dated 7 June 2019**

27 October 2025

**Important Information:**

A PERSON WHO IS BOUND BY THIS PREVENTION NOTICE AND WHO DOES NOT COMPLY WITH THIS NOTICE COMMITS AN OFFENCE UNDER THE *ENVIRONMENTAL PROTECTION ACT 1986*.

Under section 103 of the *Environmental Protection Act 1986*:

- a person who is aggrieved by a requirement contained in this prevention notice may within 21 days of being given this notice lodge with the Minister for Environment an appeal in writing setting out the grounds of that appeal; and
- any other person who disagrees with a requirement contained in this prevention notice may within 21 days of the making of that requirement lodge with the Minister for Environment an appeal in writing setting out the grounds of that appeal.

PENDING THE DETERMINATION OF AN APPEAL REFERRED TO ABOVE, THE RELEVANT REQUIREMENTS CONTAINED IN THIS PREVENTION NOTICE CONTINUE TO HAVE EFFECT.

Note that under section 118 of the *Environmental Protection Act 1986* that each person who is a director or who is concerned in the management of the body corporate may be taken to have also committed the same offence.



## Appendix 1:

### Definitions

#### In this Notice, unless the contrary intention appears –

**‘Authorised person’** means a person or member of a class of persons appointed under section 87(1) of the *Environmental Protection Act 1986 (EP Act)*.

**‘CEO’** means Chief Executive Officer, Department of Water and Environmental Regulation.

Chief Executive Officer  
Department of Water and Environmental Regulation  
Locked Bag 10  
JOONDALUP DC WA 6919  
Telephone: (08) 6364 7000  
Fax: (08) 6364 7001  
Email: [wasteprograms@dwer.wa.gov.au](mailto:wasteprograms@dwer.wa.gov.au)

**‘Days’** means calendar days, including weekends and public holidays.

**‘Department’** means the Department of Water and Environmental Regulation.

**‘Environmental Consultant’** means a person, or persons, who has qualifications and experience consistent with those described in Schedule B9 of the *National Environment Protection (Assessment of Site Contamination) Measure 1999* (the NEPM). The consultant must also:

- a) Currently reside in Australia; and
- b) Have extensive and demonstrated experience in landfills, groundwater, landfill gas and analysis; and
- c) Includes a qualified engineer, meaning a person who:
  - (i) holds a Bachelor of Engineering recognised by the Institute of Engineers; and
  - (ii) has a minimum of five years of experience working in a supervisory area of their engineering expertise; and
- d) Have extensive and demonstrated experience in the remediation of contaminated environments.

**‘EP Act’** means the *Environmental Protection Act 1986* (WA).

**‘Geotextile tubes’** means geo-bags, geo-containers, soil tubes, geosynthetic tubes or desludging bags made of high strength polypropylene woven geotextile that resists ultraviolet, environment rotting and damage, biological degradation and retains solids and allow fluids to slowly filter out.

**‘Ham and Baum, 2009’** means the document Ham, J.M. and Baum, K.A., 2009. *Measuring seepage from the waste lagoons and earthen basins with an overnight water balance test*. Transactions of the American Society of Agricultural and Biological Engineers, 52(3), 835-844.

**‘Hydraulic dredger’** means a machine specifically designed to excavate and transport under water materials, using hydraulic suction to remove sediment.

**‘Licence’** means a licence issued by the Department under Part V of the EP Act.

**‘Measuring device’** means a V-Notch Weir and or a Persall Flume and or a Magflow meter.



**'Person' to whom this notice is given'** means **City of Kalgoorlie Boulder (ABN 63 711 737 609)** the holder of prescribed premises Licence L8560/2011/2 under Part V Division 3 of the *Environmental Protection Act 1986* (WA).

**'Practice Note 21: Farm Dairy Effluent Ponds'** means DairyNZ, *Practice Note 21: Farm Dairy Effluent Ponds, Appendix B: Pond Seepage Testing*, August 2024, New Zealand.

**'Premises'** means 1 Celebration Road, South Boulder, Boulder WA 6432, Being portion of Lot 221 on Deposited Plan 217615 and Reserve 42000, Certificate of Title Volume LR3098 Folio 969 and as defined by the green line on the map in Appendix 2.

**'Provide in writing'** includes by email with an authorised signature.

**'Suitably qualified and experienced wastewater consultant'** means a person who:

1. holds a Bachelor of Environmental Engineering, and or a, Bachelor of Chemical Engineering, or a, Bachelor of Civil Engineering or a, Bachelor of Chemistry; and
2. has a minimum of 5 years of experience working in the field of liquid waste and/or wastewater treatment and engineering, including in relation to physical, chemical, and biological treatment processes; and
3. has a sound understanding of relevant Western Australian guidelines and legislation for liquid waste and/or wastewater treatment and management.

**'Inspector' means'** a person appointed to be an inspector under section 88 of the *Environmental Protection Act 1986*.

**Appendix 2 - Premises boundary depicted by green line, premises infrastructure and monitoring point**



## Appendix 3 – Site Infrastructure and equipment requirements

Department of Water and Environmental Regulation

### Licence conditions

The licence holder must ensure that the following conditions are complied with:

#### Infrastructure and equipment

1. The licence holder must ensure that the site infrastructure and equipment listed in Table 1 and located at the corresponding infrastructure location is maintained and operated in accordance with the corresponding operational requirement set out in Table 1.

**Table 1: Infrastructure and equipment requirements**

Site infrastructure and equipment	Operational requirement	Infrastructure location
Inlet works (Screw screening)	Grit and Screenings – removal of organic material	Infrastructure located within the boundary shown in Schedule 1, Figure 1.
1 X Wastewater aerobic pond labelled as Aerobic Anoxic Tank (AAT)	Wastewater treatment	
2 X Wastewater aeration pond labelled as Intermittent aeration tanks (IAT)	Wastewater treatment - Intermittent aeration	
1 X Wastewater pond labelled as Treated Effluent Balance Tank (TEBT)	Wastewater treatment – storage of treated effluent water. Treated sewerage is either pumped offsite to the holding lagoons prior to irrigation or is directed to wastewater ponding lagoons 1, 2 and 3 for further treatment.	
4 x Sludge Lagoons 1, 2, 3 and 4	Wastewater treatment- Sludge and leachate storage	
TWM lagoon	Leachate storage from de-sludging lagoons 1, 2, 3 or 4.	
Gas chlorination unit	Wastewater treatment Disinfection of treated effluent water	
2 x Wastewater treatment lagoons known as Ponding Lagoons 2 and 3	Storage of treated effluent water	

L8560/2011/2

IR-T06 Licence template (v7.0) (February 2020)

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**Appendix 4 – Holding pond locations**

<b>Name</b>	<b>Premises details</b>
Old Boulder Holding Ponds	<p>Lot 1982 Lynch Street, South Boulder, Kalgoorlie Boulder also known as Lot 1982 on Deposited Plan 219673; and</p> <p>Lot 3392 Lynch Street, South Boulder, Kalgoorlie Boulder also known as Lot 3392 on Deposited Plan 213072.</p>
Racecourse Dam	58 Maxwell Street, Kalgoorlie also known as Portion of Lot 502 on Deposited Plan 411417.
Swan Lake	Portion of Lot 503 Piccadilly Street, West Lamington, 6430 also known as Lot 503 on Deposited Plan 59258.
Piccadilly Twin Dams	3582 Piccadilly Street, West Lamington, 6430 also known as Lot 3582 on Deposited Plan 30251.
Golf Course Dam	Hawkins Street, Karkurla, Portion of Lot 515 on Deposited Plan 411412.
Combined Stormwater Dam	335 Piccadilly Street, West Lamington, 6430 also known as Lot 5012 on Deposited Plan 34471.