Environmental Protection Order

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

Mr Andrew Kilby
As trustee for the Yidney Rocks Trust
T/A Yidney Rocks Beach Front Units
A11, 99 Gregory Terrace
SPRING HILL QLD 4000

Email: andrew@yidneyrocks.com.au

Your reference: EPPR00710513

Our reference: C-CPLPO-100303459 / E-100508624

28/09/2023

Dear Mr Andrew Kilby

Take notice: that under the *Environmental Protection Act 1994* (the Act) this environmental protection order (EPO) is issued to Mr Andrew Kilby (you) 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 the activities of environmentally relevant activity (ERA) 63 - Sewage Treatment 1(a-i) – Operating sewage treatment works, other than no-release works, with a total daily peak design capacity of 21 to 100EP if treated effluent is discharged from the works to an infiltration trench or through an irrigation scheme on land described as Lots 1 – 5 on SP223894 and common property, K'Gari (Fraser Island) (the premises).

A. Grounds

This EPO is issued on the following grounds:

1. In accordance with section 358(d)(i) of the Act the department requires you to take reasonable measures to secure compliance with your General Environmental Duty (GED). Under section 319 of the Act, GED is defined as *'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'.*
2. In accordance with section 358(d)(iii) of the Act the department requires you to take reasonable measures to secure compliance with the following conditions of your environmental authority. The conditions on the Negotiated Development Application Decision Notice IDAS0035 dated 17 August 1999 are the conditions of your environmental authority and as a joint holder of Registration Certificate ENRE00814708 dated 03 April 2012, you are a joint holder of the environmental authority, collectively

Queensland Government

now referred to as **EPPR00710513** (the EA). Conditions of the EA which have not been complied with are:

(a) ***Condition E12*** *states:*

The contaminants released from the sewage treatment plant to land must comply, at the sampling and in-situ measurement point/s specified in Schedule H, with each of the release limits specified in Schedule E Table 1 for each quality characteristic.

SCHEDULE E TABLE 1 - RELEASE QUALITY CHARACTERISTIC LIMITS

QUALITY CHARACTERISTICS	RELEASE LIMIT	LIMIT TYPE
5-day Biochemical Oxygen Demand (inhibited)	20 mg/L	maximum
Suspended Solids	30 mg/L	maximum
pH	6.5 to 8.5	range
Total Nitrogen	10 -15 mg/L	range
Total Phosphorus	5 - 7 mg/L	range
Faecal Coliforms	10 organisms per 100 mL as a median value (minimum of 5 samples taken at not less than half-hourly intervals in any one day, with 4 out of the 5 samples containing less than 20 organisms per 100 mL)	

(b) ***Condition H7*** *states:*

The holder of this environmental authority is required to prepare a compliance and groundwater monitoring program for the life of the activity which demonstrates that the final effluent is complying with the performance objectives listed in Schedule E Table 1 and is not impacting on the groundwater.

(c) ***Condition H9*** *states:*

Before the monitoring programs are implemented the licensee must establish the ambient condition of the potable groundwater for Total Nitrogen, Total Phosphorus and Faecal Coliforms.

(d) ***Condition H13*** *states:*

The holder of this development approval must notify the Administering Authority in writing of any monitoring result, which indicates an exceedance of any development condition release limit within 28 days of completion of analysis.

(e) ***Condition A7*** *states:*

On or before 1 January 2001, the holder of this development approval, must develop an effective and appropriate Site-based Management Plan which details how the holder of this development approval will manage the actual and potential environmental impacts resulting from the carrying out of the environmentally relevant activity.

(f) ***Condition A8*** *states:*

The site-based Management Plan must address at least the following matters:

(i) Routine operating procedures to prevent or minimise environmental harm, however occasioned or caused during normal operations;

(ii) Maintenance practices and procedures;

(iii) Contingency plans and emergency procedures to deal with foreseeable risks and hazards including corrective responses to prevent and mitigate environmental harm (including any necessary site rehabilitation);

(iv) Monitoring of the release of contaminants into the environment including procedures, methods, record keeping and notification of results;

(v) Assessment of the environmental impact of any release of contaminants into the environment including procedures, methods, record keeping and notification of results;

(vi) Handling of environmental complaints;

(vii) Keeping and production of environmental records and reports;

(viii) Lines and methods of communication to be utilised for communication of procedures, plans, incidents, potential environmental problems and results including a feedback mechanism to ensure that management is made aware of potential environmental problems and any failure of procedures adopted;

(ix) Staff training and awareness of environmental issues related to the operation of the environmentally relevant activity, including responsibilities under the Environmental Protection Act 1994 and

(x) A Contaminant Release Area Suitability Report, which must address the suitability of the proposed release area and how land disposal of effluent is to be managed and scheduled having regard to at least the following:

i. Type of vegetation intended to be grown in the contaminant release area;

ii. Groundwater level, groundwater quality and groundwater use within 50 metres of the contaminant release area;

iii. Cropping practice for the contaminant release area;

iv. Sustainable hydraulic loading for the contaminant release area;

v. Sustainable organic loading rate (biological oxygen demand loadings) for the contaminant release area;

vi. Sustainable nitrogen loadings for the contaminant release area;

vii. Sustainable phosphorus loadings for the contaminant release area;

viii. Sustainable salt loadings for the contaminant release area.

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

1. You are a joint holder of EA EPPR00710513 which authorises ERA 63 – Sewage Treatment – 1(a-i) – Operating sewage treatment works, other than no-release works, with a total daily peak design capacity of 21 to 100 EP – if treated effluent is discharged from the works to an infiltration trench or through an irrigation scheme.

2. The department is satisfied that you have been responsible for the operation and maintenance of the sewage treatment plant and operating under the EA since 3 April 2012.

3. **s14** of the Act states—

Environmental harm is any adverse effect, or potential adverse effect (whether temporary or permanent and of whatever magnitude, duration of frequency) on an **environmental value**, and includes environmental nuisance.

Environmental harm may be caused by an activity—

a) Whether the harm is a direct or indirect result of the activity; or
b) Whether the harm results from the activity alone or from the combined effects of the activity and other activities or factors.

4. **s9** of the Act defines **environmental value** as—

a) A quality or physical characteristic of the environment that is conducive to ecological health or public amenity or safety; or

b) Another quality of the environment identified and declared to be an environmental value under an environmental protection policy or regulation.

5. The scheduled environmental values for protection under the Environmental Protection (Water and Wetland Biodiversity) Policy 2019 for Fraser Island waters are published in: *Environmental Protection (Water) Policy 2009 – Fraser Island environmental values and water quality objectives Basin No. 139, July 2010* which can be found at: https://environment.des.qld.gov.au/__data/assets/pdf_file/0025/88081/fraser-island-ev-2010.pdf.

6. The scheduled values of groundwaters are aquatic ecosystems, irrigation, farm supply, stock water and drinking water. In addition, the management intent (level of protection) for aquatic ecosystems is for high ecological value and where ground waters interact with surface waters, groundwater quality should not compromise identified environmental values and water quality objectives for those waters.

7. On 6 September 2022, authorised officers of the department Chris Ashcroft (Team Leader) and Glenn Hayward (Environmental Officer) inspected Yidney Rocks Beachfront Units and following the inspection authorised officers requested copies of monitoring results of water quality release limits pursuant to condition E12 of the EA.

8. On 10 October 2022, Mr Andrew Kilby provided monitoring results of contaminants released from sewage treatment activities to land at the site (samples collected 27 September 2022). The monitoring results confirmed exceedances of the following water quality characteristic release limits:
    - suspended solids (Result: 97mg/L, Limit: 30mg/L (max);
    - biochemical oxygen demand (Result: 30mg/L, Limit: 20mg/L (max)); and
    - Total Nitrogen (Result: 38.7mg/L, Limit: 10 - 15mg/L (range)).

9. On 25 January 2023, the department issued a formal warning to Mr Andrew Kilby & Glenn Weatherford as the holders of the EA as trustees for the Yidney Rocks Trust for an alleged contravention of Condition E12 of the EA.

10. On 3 May 2023, an options assessment for the Yidney Rocks wastewater treatment plant was submitted to the department on your behalf by Future-plus Environmental. This report detailed effluent sampling results undertaken on the 13 February 2023 at the sewage treatment plant outlet and sampling results undertaken at an onsite groundwater bore. The results confirm exceedances of the following water quality characteristic release limits:

Table 1. Effluent Analytical Results from 13th February 2023 tabulated.

			DATE	13/02/2023	13/02/2023
			Sample Location	STP Outlet	GW Well
Analytes	*Unit*	*LOR*	**EPPR00710513– Schedule Table 1 Release Quality Characteristic Limits**		
Faecal coliforms	*CFU/100ml*	*1*	**150 CFU/100ml***	**3060**	<1
Escherichia coli	*CFU/100ml*	*1*	**-**	---	<1
pH Value (PC Titrator)	*pH Unit*	*0.01*	**6.5 to 8.5**	**7.03**	**5.8**
Suspended Solids	*mg/L*	*5*	**<30 mg/L**	**12**	<5
Nitrite + Nitrate as N	*mg/L*	*0.01*	**-**	**5.69**	**0.1**
Total Kjeldahl Nitrogen as N	*mg/L*	*0.1*	**-**	**12.1**	<0.1
Total Nitrogen as N	*mg/L*	*0.1*	**<10 mg/L**	**17.8**	**0.1**
Total Phosphorus as P	*mg/L*	*0.01*	**<5 mg/L**	**7.39**	<0.01
Dissolved Oxygen	*mg/L*	*0.1*	**>30mg/L**	**4.8**	**8.7**
Biochemical Oxygen Demand	*mg/L*	*2*	**<20 mg/L**	<2	<2

**150 CFU/100ml as a median value (minimum of 5 samples taken at not less than half-hourly intervals in any one day, with 4 put of the 5 samples containing less than 600 CFU/100ml)*

11. Following the inspection on 6 September 2022 and a review of information available to the department (including outcome of previous compliance inspection of May 2015) it has been identified that you have not implemented a 'Compliance and Groundwater Management Plan' (and associated monitoring) which 'demonstrates that the final effluent is not impacting on the groundwater' (condition H7 of the EA).

12. On 15 June 2023, Cate Puschmann (Compliance Delivery Manager) had a discussion with Paul Wood, (Environmental Principal from Future-plus Environmental) regarding the location of the groundwater bore sampled on 13 February 2023. Paul explained that this is northwest of the effluent disposal area and highly likely upgradient of the current disposal area.

13. A review of the Yidney Rocks Sewage Treatment Works Site Based Management Plan (SBMP) – July 2015 shows that you have not complied with the requirements of condition A8 of the EA in that the SBMP does not address the following matters:

    (x) A Contaminant Release Area Suitability Report, which must address the suitability of the proposed release area and how land disposal of effluent is to be managed and scheduled having regard to at least the following:

    i. Type of vegetation intended to be grown in the contaminant release area;
    ii. Groundwater level, groundwater quality and groundwater use within 50 metres of the contaminant release area;
    iii. Cropping practice for the contaminant release area;
    iv. Sustainable hydraulic loadings for the contaminant release area;
    v. Sustainable organic loading rate (biological oxygen demand loadings) for the contaminant release area;

vi. Sustainable nitrogen loadings for the contaminant release area;
vii. Sustainable phosphorus loadings for the contaminant release area;
viii. Sustainable salt loadings for the contaminant release area.

14. A review of departmental records over the past 3 years prior to the inspection show that you have not notified the administering authority in writing of any monitoring result, which indicates an exceedance of limits set by EA condition release limit within 28 days of completion of analysis (condition H13 of the EA).
15. It is reasonable to require you to notify the administering authority when monitoring results do not comply with treated effluent release limits or show elevated contaminant trends in groundwater results.
16. Given the facts and circumstances detailed above the department considers that you have failed to take all reasonable and practical measure to prevent and minimise the harm or likely harm from carrying out the activity and you have therefore failed to comply with your General Environmental Duty.
17. The department considers that you have failed to comply with conditions **E12, H7, H9, H13, A7** and **A8** of the EA, and that it is reasonable to require you to implement actions to secure compliance with these conditions.

B. Requirements

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

1. By **20 October 2023**, you must:
    i. engage an **appropriately qualified person(s) (AQP)** to carry out a performance assessment of the sewage treatment plant (STP), including of the effectiveness of the disinfection system, and develop recommendations to achieve compliance with **Table A: Treated effluent quality characteristics, sampling frequency and limits** (reference below in EPO); and
    ii. notify the department of the name and contact details of the engaged **AQP** via email to widebay.esr@des.qld.gov.au.
2. By **20 October 2023**, you must engage an **AQP** to review the current groundwater monitoring program and develop a program designed to monitor the effects of the activity which:
    i. is able to monitor the quality of groundwater to detect any possible release of contaminants and determine the impacts of the release of treated effluent from the STP on the groundwater quality in the underlying aquifer;
    ii. includes a sufficient number of bores installed at locations and depths which yield representative groundwater samples;
    iii. includes monitoring of background groundwater quality, hydraulically up-gradient of any release of contaminants to groundwater;
    iv. includes monitoring of downstream groundwater quality, hydraulically down gradient of sewage treatment plant and irrigation areas; and
    v. considers the potential use of groundwater which may be impacted.
3. By **20 October 2023**, you must commence monitoring of the treated effluent until you achieve four (4) consecutive monitoring results which comply with **all** the limits for quality characteristics specified in

Table A: Treated effluent quality characteristics, sampling frequency and limits (reference below in EPO) on a **monthly** basis.

4. By **20 October 2023**, you must commence **quarterly** monitoring of groundwater for the quality characteristics specified in **Table B: Groundwater quality characteristics and sampling frequency** until **requirement 3** is achieved.
5. All monitoring conducted under this EPO must be in accordance with the administering authority's *Monitoring and Sampling Manual 2018* and all monitoring devices must be effectively calibrated and maintained.
6. All analyses required under this EPO must be carried out by a laboratory that has National Association of Testing Authorities (NATA) certification, or an equivalent certification, for such analyses.
7. All monthly monitoring results must be submitted to the administering authority via email to widebay.esr@des.qld.gov.au within 1 week of receiving these from the laboratory.
8. By **15 December 2023**, a Site Based Management Plan (SBMP) must be prepared and implemented at the premises. The SBMP must identify all sources of environmental harm, including but not limited to the actual and potential release of all contaminants, the potential impact of these sources and what actions will be taken to prevent the likelihood of environmental harm being caused. The SBMP must also provide for the review and 'continual improvement' in the overall environmental performance of the environmentally relevant activity carried out. The SBMP must address the following matters:
    i. Routine operating procedures to prevent or minimise environmental harm, however occasioned or caused during normal operations;
    ii. Maintenance practices and procedures;
    iii. Contingency plans and emergency procedures to deal with foreseeable risks and hazards including corrective responses to prevent and mitigate environmental harm (including any necessary site rehabilitation);
    iv. Monitoring of the release of contaminants into the environment including procedures, methods, record keeping and notification of results;
    v. Assessment of the environmental impact of any releases of contaminants into the environment including procedures, methods, record keeping and notification results;
    vi. Handling of environmental complaints;
    vii. Keeping and production of environmental records and reports;
    viii. Lines and methods of communication to be utilised for communication of procedures, plans, incidents, potential environmental problems and results, including a feedback mechanism to make sure management is made aware of potential environmental problems and any failure of procedures adopted;
    ix. Staff training and awareness of environmental issues related to the operation of the environmentally relevant activity, including responsibilities under the *Environmental Protection Act 1994;* and
    x. Contaminant Release Area Suitability Report, which must address the suitability of the proposed release area and how land disposal of effluent is to be managed and scheduled having regard to at least the following:
        (i) Type of vegetation intended to be grown in the contaminant release area;
        (ii) Groundwater level, groundwater quality and groundwater use within 50 metres of the contaminant release area;
        (iii) Cropping practice for the contaminant release area;
        (iv) Sustainable hydraulic loadings for the contaminant release area;

(v) Sustainable organic loading rate (biological oxygen demand loadings) for the contaminant release area;
(vi) Sustainable nitrogen loadings for the contaminant release area;
(vii) Sustainable phosphorus loadings for the contaminant release area;
(viii) Sustainable salt loadings for the contaminant release area.

9. By **2 March 2024**, you must require the **AQP** to prepare a report with the findings from the assessment of the performance of the STP in accordance with **requirement 1** and the findings from the review of the groundwater monitoring program in accordance with **requirement 2**. This report must include the recommended actions including a timeline associated with any works and measures to achieve compliance with the EPO. A copy of the report must be submitted to the administering authority via email to widebay.esr@des.qld.gov.au.
10. By **27 April 2024,** you must commence implementation of the works and measures recommended by the **AQP** to achieve compliance with **requirement 1 and requirement 2** of the EPO.
11. Works associated with **requirement 10** of the EPO must be completed by **27 July 2024.**
12. By **27 August 2024,** you must prepare a completion report that verifies all works have been implemented. A copy of the report must be submitted to the administering authority via email to widebay.esr@des.qld.gov.au.
13. Following the achievement of four (4) consecutive compliant monitoring results, as outlined in **requirement 3 and requirement 4**, you must implement a treated effluent monitoring program and groundwater monitoring program that complies with **Table A and Table B** for six (6) months:

Table A: Treated effluent quality characteristics, sampling frequency and limits.

Quality Characteristic	Sampling Frequency	Limit
pH	Monthly	Not less than 6.5, not more than 8.5
5-day BOD (mg/L)	Monthly	20 mg/L (maximum)
Suspended Solids (mg/L)	Monthly	30 mg/L (maximum)
Faecal Coliforms (Organisms/100ml)	Monthly	<10 organisms per 100ml as a median value (minimum of 5 samples taken at not less than half-hourly intervals in any one day, with 4 out of the 5 samples containing less than 20 organisms per 100ml.
Total Nitrogen (mg/L)	Monthly	10 - 15 mg/L (range)
Total Phosphorous as P (mg/L)	Monthly	5 mg/L (range)

Table B: Groundwater quality characteristics and sampling frequency

Quality Characteristic	Sampling Frequency
pH	Quarterly
5-day BOD (mg/L)	Quarterly
Suspended Solids (mg/L)	Quarterly
Faecal Coliforms (Organisms/100ml)	Quarterly
Total Nitrogen (mg/L)	Quarterly
Total Phosphorous as P (mg/L)	Quarterly

Definitions

An **appropriately qualified person(s)** means a person(s) who has professional qualifications, training, skills, or experience relevant to the requirements of the Environmental Protection Order, and can give authoritative assessment, advice, and analysis using 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 $ 967,500 or five years imprisonment for an individual or $ 4,837,500 for a corporation.
- The maximum penalty for contravening an EPO is 4500 penalty units, totalling $ 696,600 for an individual or $ 3,483,000 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 $ 7,740, for an individual or $ 38,700 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 $ 7,740 for an individual or $ 38,700 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.

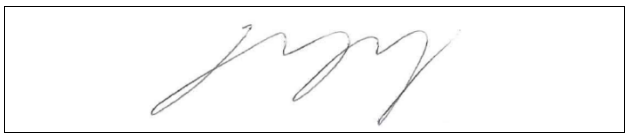
Once the original decision has been reviewed, a person who is dissatisfied with the review decision may be able to appeal against that decision to the relevant court within 22 business days after receiving notice of the review decision.

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 Jeremy Wheeler, Team Leader on (07) 4302 8589.



Signature

28/09/2023

Date

Joe Winzenberg
Acting Manager Compliance
Delegate of the Chief Executive
Department of Environment and Science
Environmental Protection Act 1994

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