Approved form

Environmental Protection Act 1994

Transitional environmental program

This form must be used when proposing a transitional environmental program (TEP) to the administering authority pursuant to section 331 of the Environmental Protection Act 1994 *. For further information on TEPs refer to the Transitional Environmental Programs Guideline (ESR/2016/2277) and Annual return for a transitional environmental program form (ESR/2016/2139).*

TRANSITIONAL ENVIRONMENTAL PROGRAM FOR Nebo Wastewater Treatment Plant
Section 330 of the *Environmental Protection Act 1994*

Individual or Company Responsible:	ISAAC REGIONAL COUNCIL [1 Batchelor Parade, MORANBAH QLD 4744 [ABN - 39 274 142 600]
Environmental Authority number (if relevant)	[EPPR00791913]
Environmental Authority holder names (if relevant)	ISAAC REGIONAL COUNCIL (IRC)
Development Approval number (if relevant)	[n/a]
Title:	[Nebo Wastewater Treatment Plant (WWTP) TEP]
Date:	02/05/2020
Reason for TEP:	Section 330(a): Reduce environmental harm caused by the activity Section 330(c): Comply with a condition of an environmental authority Since November 2019, IRC has notified the department of several exceedances with environmental authority (EA) EPPR00791 913 release limits for electrical conductivity (EC) at the Nebo WWTP. It was found that the breaches with the EA limits was due to waste brine being discharged to sewer at the Nebo Water Treatment Plant (WTP). IRC contacted DES to advise that due to ceasing irrigation of the treated effluent to land (due to the exceedances with EA release limits for EC), the water level in the treated effluent storage dam was 100mm above the top operational working level and 400mm from overflowing at the spillway.

	On 2 March 2020, IRC submitted a Program Notice of a relevant event for Nebo WWTP under section 350 of the *Environmental Protection Act 1994.* On 11 March 2020, IRC were issued with a Receipt of Program Notice requiring the submission of a draft Transitional Environmental Program (TEP) by 2 May 2020. The key objective of the TEP is to transition the site to compliance with the EA conditions by the end of the TEP. To achieve this, IRC must manage the Electrical Conductivity levels more effectively through improved processes at the WTP and amendment to current environmental authority conditions.
Site details:	Wastewater Treatment Plant site and irrigatable area Peak Downs Highway, Nebo; Lot 98 Plan SP159584
Period of TEP:	2 years & 7 months
Start date:	[2/05/2020]
Finish date:	[31/12/2022]

Content of Program:

To reduce environmental harm caused by the activity: (section 330(1)(a))

Isaac Regional Council (IRC) have engaged suitable qualified professionals to assess the irrigated land at the Nebo Wastewater Treatment Plant (WWTP). (Please see attachment #1). Medli modelling will indicate the levels of EC that the environment can absorb without impact. ~~These levels~~The Medli modelling ~~will be~~has been provided to DES for consideration in order to determine an appropriate revised EC level consistent with ~~of amendment to current EC levels that are consistent with~~ this type of soil.

IRC will also reduce irrigation through encouragement of the recycled water (effluent) for use as dust suppression to lower dam levels to assist with rainfall and wet periods. Irrigation will only be used to maintain Safe Levels in the Effluent Storage Dam (ESD).

The above initiatives to reduce environmental harm may be necessary for longer periods should Nebo Water Treatment Plant (WTP) investigations into infrastructure, design and process upgrades be required and will remain in place until completion of recommended works.

Optimisation of the Nebo Water Treatment Plant is underway and reductions in EC levels have been achieved.

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Description of transition:

Comply with a condition of an environmental authority: (section 331(e))

Sample results of effluent to be released to land at Isaac Regional Council's Nebo WWTP are currently not complying with condition 5-L1 in Table 5.2 for EC of Environmental Authority (EA) EPPR00791913. Design changes and infrastructure upgrades at the ~~both the Nebo Wastewater Treatment Plant and the~~ Nebo WTP will ensure future compliance of EC levels.

Description of transition:

Prevention of Harm: (section 331(c)):

Upgrades of equipment/infrastructure/process design and other recommendations as per the Nebo WTP investigation will prevent any further environmental harm. Interim measures before the recommended upgrades commence will include reduced irrigation with irrigation used to maintain safe levels in the effluent storage dam.

TABLE 1
Objective(s) [section 331(a)] State the objectives to be achieved and maintained under the TEP for the activity. The objectives must be **specific** and **clear** and **relate to achieving compliance** with the Act, the *Environmental Protection Regulation 2008*, environmental protection policies, or if relevant, the conditions of approval.
Objective 1: Ensure that the treated effluent released to land from the Nebo WWTP complies with all water quality parameters of EA EPPR00791913, in particular electrical conductivity (EC). Optimisation of the Nebo WTP operations to reduce the salt within wastewater released to the sewer network. Seek amendment of the EC limit ~~to condition~~in condition 5-L1 in Table 5.2 of the EA based on ~~to a level of 4000us/m for EC and~~ Medli modelling ~~will be simulated~~ to find the maximum soil bearing capacity for EC without any adverse impact to the irrigated land at Lot 98 Plan SP159584.
Objective 2: Once appropriate EC level has been established, an investigation for improvements to the Nebo WTP to reduce salt in wastewater will be undertaken by further optimisation of the Nebo WTP, undertaking improvements or preventing the brine entering the sewer. This will assist with lowering environmental impacts.
Objective 3: Upon agreement with the DES and IRC, actioning of investigation recommendations within a timely manner that prevents impact on the environment as well as regional population with financing.

Actions [section 331(b)] List the actions to be taken to achieve each of the objectives. Actions must take into account: 1. Best practice environmental management for the activity (including how these measures stand against the measures currently used nationally and internationally for the activity [section 331(b)(i)]); and 2. The risks of environmental harm being caused by the activity (including the proposed actions, how the risks have been considered and how they will be treated or mitigated [section 331(b)(ii)]).	**Commencement date** [section 331(b)] A start and finishing date for each action or groups of actions must be included.	**Completion date**
Action #1 A Medli modelling report to determine an acceptable revised EC level will be ~~will be~~ provided to DES for review. ~~Optimisation of the Nebo Water Treatment Plant is underway and reductions in EC levels have been achieved.~~ ~~IRC has engaged appropriately qualified persons to carry out Medli Modelling of the irrigatable area at Lot 98 Plan SP159584 Nebo Wastewater Treatment Plant (WWTP) and a report will be provided on best practice management of the site with recommendations. Levels of 4000us/m or as indicated in the Medli Modelling are being sort for a suitable EC release limit that prevents environmental harm. Monitoring of EC levels is currently carried out manually so investigation for automation will be reviewed by suitably qualified persons.~~ • ~~IRC will engage suitable qualified professionals for the development and implementation of an Irrigation Management Plan to achieve compliance with condition 5-L2 of the EA and the design and implementation of a REMP with annual report guidelines for annual submission to achieve compliance with conditions 5-G2, 5-G3 and 5-G8 of the EA.~~	~~2 May 2020~~	Completed ~~7 August 2020~~
1.1 ~~1.1~~ - Convene pre-lodgement meeting for recommended changes to Environmental Authority EPPR00791913 to amend EC level based on Medli modelling and best practice environmental management. *Note: IRC has nominated an indicative revised EC value of 4000us/cm.* ~~Medli Modelling report will be provided to DES for review~~		~~14 August 2020~~ 30 September 2020
1.2 - IRC will engage suitably qualified professionals to develop an Irrigation Management Plan (IMP) and a REMP. The objective of the IMP will be to: • specify how irrigation to land at the Nebo WWTP will be managed having regard to the high EC levels, and with a particular focus on soil salinity management and monitoring; and		9 October 2020 ~~4 September 2020~~

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• demonstrate how effluent will be sustainably disposed onto land in accordance with best management practices to prevent potential offsite movements; and • address how any potential impacts to groundwater resulting from the increased EC levels will be monitored. The objective of the REMP will be to achieve compliance with conditions 5-G2, 5-G3 and 5-G8 of the EA. ~~Convene pre-lodgement meeting for recommended changes to Environmental Authority EPPR00791913 to Electrical Conductivity levels based on Medli-Modelling and best practice environmental management.~~		
1.3 IRC will submit a copy of the draft IMP and REMP referred to in Action 1.2 to DES for its review and comment.		13 November 2020
1.4 IRC will provide a final copy of the IMP and REMP to DES, and will commence implementing the actions, recommendations or strategies necessary to meet the objectives of these documents.		15 December 2020
1.~~5~~3 – Upon approval of EC amendments all stakeholders will be informed and updating of all critical control point guidelines carried out.	Upon ~~confirmation of DES of new parameters.~~completion of EA amendment	Ongoing
Action # 2.0 IRC will engage suitable qualified professionals for the investigation for improvements and provide recommendations for the Nebo WTP to reduce waste water salt content or prevent waste water entering the sewer network and impacting Nebo WWTP.	~~After EA amendments~~Following EA amendment	16 December 2020
2.1 – IRC will supply investigation report with recommendations to DES		20 Jan 2021
Action # 3.0 IRC to convene meeting with DES to discuss investigation report supplied ~~on the 20 Jan 2021~~as required by Action 2.1 ~~and preferred way forward.~~		3 February 2021
3.1 – IRC will provide DES with final confirmed scope of works based ~~on agreement at meeting held on the 3 February 2021 by the 17 March 2021~~outcomes from Actions 2.1 and 3.0.		17 March 2021

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3.2 – IRC ~~will provide schedule of works to the regulator and~~to commence ~~begin~~ s~~S~~chedule of works from 30th July 2021. ~~As per IRC~~ Training of all IRC staff will be included for all new installations, procedures and work instructions as per IRC's Integrated Management Strategy. The action time frame is longer here so procurement processes are followed, and budgeting can take place.		30 July 2021
3.3 – IRC will engage suitably qualified professionals to audit the completed works ~~and provide DES with report stating works have been completed.~~		2 December 2022

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Performance indicators [section 331(g)] Detail how and when each action will be measured to indicate that the action was completed successfully and that the objective of the TEP is being achieved. Performance indicators must not be measured more than six months apart [section 331(g)] and must be quantitative (that is, able to be measured, assessed and audited in a consistent, objective and repeatable manner).	**Commencement date**	**Completion date**
Please refer to dates and times as indicated in the actions timeframes as the performance indicators.	Date DES approves TEP~~2 May 2020~~	2 December 2022
IRC will also continue frequent monitoring to indicate an improvement in the EC levels in the influent to the WWTP and also monitor EC levels as per the EA for effluent irrigated to land being within compliance.	Date DES approves TEP~~2 May 2020~~	ongoing

Monitoring [section 331(h)] Provide details of the monitoring activities required to ensure compliance with the proposed TEP actions and dates. This includes details of who will conduct the activities, how monitoring needs to occur and the environmental and scientific testing that may be required.	**Commencement date**	**Completion date**
1. All monitoring as required by the EA will continue for the duration of the TEP. All verification sample testing will be undertaken by Mackay Regional Councils laboratory a NATA accredited laboratory	Date DES approves TEP~~2 May 2020~~	2 December 2022
2. All water quality will be undertaken in accordance with the current Isaac Regional Council work instructions that are modelled off the Queensland's Government Monitoring and Sampling Manual 2018	Date DES approves TEP~~2 May 2020~~	2 December 2022

Reporting [section 331(h)] Regular progress reports are to be provided to EHP on specified dates including monitoring results, a description of activities and issues from the previous month and any proposed activities for the next month. A final report describing how the objective(s) of the TEP was achieved must be provided within one month of the final action being completed and prior to the end date of the TEP. Failure to carry out prescribed actions must be reported.	**Commencement date**	**Completion date**
1. A progress report will be prepared detailing the actions taken, milestones achieved and the forecasted actions every 6 months from the inception of the TEP 2 May 2020. IRC will increase frequency of reporting to quarterly (3 monthly) after agreed scheduled works have started after 30 July 2021. IRC will conduct monthly verified testing of influent samples at the Mackay Regional Councils Laboratory (MRC). Weekly insitu monitoring will also be implemented. Verified results of the EC levels will be collected from the MRC data and provided in excel format for the departments review on or one week prior to the 6 monthly reporting timeframes.	Date DES approves TEP~~30 July 2020~~	2 December 2022
2. IRC will engage suitably qualified professionals to audit and provide report confirming works were completed within the TEP		2 December 2022

3. A final report describing how the objectives of the TEP were achieved will be provided by IRC to DES on or before 31 December 2022.	Date DES approves TEP~~2 May 2020~~	31 December 2022

Declaration

As per section 481 of the *Environmental Protection Act 1994*, it is an offence to state anything to an authorised person that you know is false or misleading in a material particular or omit from a statement made to an authorised person anything without which the statement is, to your knowledge, misleading in a material particular.

I declare that:

- I do solemnly and sincerely declare that the information provided is true and correct to the best of my knowledge. I understand that it is an offence under section 480 of the *Environmental Protection Act 1994* to give to the administering authority, or an authorised person, a document containing information that I know is false, misleading or incomplete in a material particular[1].
- I understand that information supplied on or with this application form may be disclosed publicly in accordance with the *Right to Information Act 2009* and the *Evidence Act 1977.*

INDIVIDUAL OR IF COMPANY, EXECUTIVE OFFICER NAME
SIGNATURE
POSITION OF SIGNATORY (IF RELEVANT)

Please return your completed application to

Post: Department of Environment and Science
GPO Box 2454
BRISBANE QLD 4001

Permit and Licence Management
Department of Environment and Science
Level 3, 400 George Street
BRISBANE QLD 4000
Business hours: 8:30am–4:30pm business days

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Email: **palm@des.qld.gov.au**
Courier or hand delivery: