

Our Reference: Contact: MD15/1969-11, EF13/8694 Natasha Ryan 02 4908 6833



Mr Hugo Harmstorf Chief Executive Officer IPART PO Box K35 HAYMARKET POST SHOP NSW 1240

Dear Mr Harmstorf

COORANBONG WATER PTY LTD LICENCE APPLICATION UNDER WATER INDUSTRY COMPETITION ACT 2006

I refer to your letters, dated 25 March 2015, to the Minister for the Environment and to the Manager Hunter Region of the Environment Protection Authority (EPA). The letters invite comment from the EPA in relation to Cooranbong Water Pty Ltd's (Cooranbong Water) licence application under the *Water Industry Competition Act 2006* (WICA) for a proposal at Cooranbong.

The Minister has referred your letter to the EPA for consideration and direct response. Please accept this letter as a response to all correspondence.

The EPA has considered your request and offers the following comments.

Environment Protection Licence

The EPA understands that the proposal includes a sewerage system which will consist of sewer reticulation, treatment, residential reuse and irrigation which will process up to 1,500 kilolitres of effluent per day at full development at Cooranbong. The EPA understands that phase one of the project will involve a reticulated sewerage system for up to 156 lots with up to two days storage (160 kilolitres). All raw sewage will be delivered from the customer lot via the pressure sewer reticulation network and discharged to Hunter Water Corporation's (HWC) sewerage network without treatment. The EPA understands that phase two of the project will involve construction of a sewage treatment plant (STP) which will utilise a membrane bioreactor and disinfection treatment process such that treated water can be recycled within the scheme area.

The EPA reviewed HWC's supporting letter and is concerned that during phase one of the project, HWC may not be able to receive all of Cooranbong Water's untreated sewage during periods of high demand on HWC's infrastructure. Cooranbong Water would need to ensure adequate storage of sewage to prevent surcharge and pollution of waters from any surcharge event during this period, and ensure that adequate odour management measures are in place.

The EPA understands that Cooranbong Water is currently negotiating a permanent connection to HWC's sewerage network for discharging excess sewage, but if this cannot be negotiated that discharge to waters would be needed. The EPA advises that an Environment Protection Licence (EPL) from the EPA is required for sewage treatment systems (STS) under the *Protection of the Environment Operations Act 1997*

Locked Bag 914, Coffs Harbour NSW 2450 Federation House Level 7, 24 Moonee Street, Coffs Harbour NSW 2450 Tel: (02) 6651 5946 Fax: (02) 6651 6187 ABN 43 692 285 758 www.epa.nsw.gov.au (POEO Act) if the activity has a processing capacity that exceeds 2,500 equivalent persons or 750 kilolitres per day and if the effluent is being discharged to land or waters. As the project exceeds this capacity and treated effluent is likely to be discharged to land and possibly waters, Cooranbong Water would require an EPL for the project both to construct and operate the STS.

The EPA advises that integrated development can be assessed under Part IV of the *Environmental Planning and Assessment Act 1979* (EPA Act). If assessment is undertaken via a Review of Environmental Factors under Part V of the EPA Act and consent is given the EPA may require Cooranbong Water to provide a more robust Environmental Impact Assessment when it applies to the EPA for an EPL. The EPA would also need to consider if the application requires public exhibition under section 45(i) of the POEO Act.

The EPA notes that an Environmental Impact Statement (EIS) was not included in the package of information forwarded to the EPA, only a table of contents for a Statement of Environmental Effects (SEE). As a result, the EPA cannot make any comment on the environmental impacts. A copy of the EPA's Environmental Assessment Requirements (EARs) is enclosed at Attachment A to assist IPART and Cooranbong Water in understanding EPA requirements.

The main issues of interest to the EPA are:

- impacts on water quality and site water management;
- impacts from effluent irrigation;
- · impacts on air quality including odours;
- waste management and disposal; and
- potential noise impacts due to construction and operation.

Attachment A presents a more detailed explanation of the EPA's main issues regarding the proposed development. Please note that the issuing of EARs should not be construed as support or endorsement of the proposed development.

Attachment B provides links to numerous reference materials that may assist the proponent to prepare an adequate EIS.

Cooranbong Water should be aware that any commitments made in the EIS, Statement of Environmental Effect or Review of Environmental Factors may be formalised into EPA's EPL. Accordingly, pollution control measures should not be proposed if these are impractical, unrealistic, or beyond the financial viability of the development.

The EPA requests that Cooranbong Water provides **one printed copy and one electronic copy** of the EIS, WICA Licence and any supporting or background reports when lodging the application for an EPL with the EPA. These documents should be lodged with the EPA's Regional Manager – Hunter at PO Box 488G, Newcastle NSW 2300 and <u>hunter.region@epa.nsw.gov.au</u>

WICA Licence

As the EPA advised above, a copy of the EIS has not been provided to the EPA. As a result the EPA is not in a position to recommend any conditions that IPART should include on the WICA Licence, should it be approved.

POEO Act Breaches

The EPA is not aware of any breaches of the POEO Act by Cooranbong Water.

If you wish to discuss this matter further please contact Natasha Ryan on 02 49086833.

Yours sincerely

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-7 MAY 2015

GARY DAVEY Director North Environment Protection Authority

ATTACHMENT A

ENVIRONMENT PROTECTION AUTHORITY- ENVIRONMENTAL ASSESSMENT REQUIREMENTS

GENERAL INFORMATION

The following information must be provided in the Environmental Impact Statement (EIS) to enable EPA to accurately assess the environmental implications of the proposed activity. The EIS must adequately describe the development proposal and the existing environment including air, noise, waters, soils, chemicals and waste.

THE PROPOSAL

The objectives of the proposal should be clearly stated and refer to:

- The size and type of the operation.
- The nature of the processes and the products, by-products and wastes produced.
- The use or disposal of products or wastes.
- The anticipated level of performance in meeting required environmental standards and cleaner production principles.
- The staging and timing of the proposal.
- The proposal's relationship to any other industry or facility.

THE PREMISES

The EIS will need to fully identify all of the processes and activities intended for the site and during the life of the project. This will include details of:

- A site plan prepared by a registered surveyor clearly showing the boundaries of any proposed premises that will be subject to an Environment Protection Licence (EPL) and the proposed locations of any discharge points covered by an EPL.
- Ownership and/or land use details of any premises and land likely to be affected by the proposed development including lot and DP numbers.
- Maps and/or aerial photographs, showing:
 - o The location of the proposed facility and details of the surrounding environment.
 - The proposed layout of the site.
 - All equipment proposed for use at the site.
 - Appropriate landuse zoning.
 - o Topography, vegetation, location of utilities and services.
 - The location of residences and properties that may be impacted by the operation.
 - The location of any environmentally sensitive areas such as conservation areas, wetlands, creeks or streams, watercourses and stormwater systems.
 - o Surface water management systems.
 - Chemicals, including fuel, used on the site and proposed methods for their transportation, storage, use and emergency management.
 - Waste generation and disposal.
 - Methods to mitigate any expected environmental impacts of the development.

WATER MANAGEMENT

The EIS must provide sufficient information to demonstrate that the proposed development can be operated whilst complying with the *Protection of the Environment Operations Act 1997*, in particular, the protection of water quality during construction and operation of the facility.

The methodology, data and assumptions used to design any pollution control works and assess the potential impact of the proposal on water quality (ground and surface waters), must be fully documented and justified.

The EIS must include an adequacy assessment of stormwater controls. This assessment must determine sediment basins are adequately sized based on relevant guidelines and that discharges to waters from any sediment basins or other treatment systems comply with the requirements of the *Protection of the Environment Operations Act*.

The EIS must identify any fuel or chemical storage areas to be established on the site and describe the measures proposed to minimise the potential for leakage or the migration of pollutants into the soil/waters or from the site.

The EIS must also describe the sewage treatment and effluent management processes used on site including the proposed numbers of occupancy using the premises and water balance. Should waters be discharged to a waterway the EIS must include a mixing model which has included adequate background water quality monitoring and environmental impact assessment.

The EIS must include a waste water irrigation assessment that includes reference to EPA's *Environmental Guidelines Use of Effluent by Irrigation 2004.*

NOISE AND VIBRATION IMPACTS

The EIS must include a noise assessment of the existing environment, potential impacts and proposed noise amelioration measures. The EPA's "*New South Wales Industrial Noise Policy*" (EPA, 2000) provides a guide to the methodology and assessment criteria used by EPA to determine noise limits or levels.

The evaluation should take into account the ground-based operational phases of the development over the "operating" hours proposed and take into account adverse weather conditions including temperature inversions. Sound power levels measured or estimated for all plant and equipment should be clearly stated and justified.

The EIS should include an assessment of cumulative noise impacts, having regard to existing developments and developments which have received development consent in the area but which have not commenced.

The EIS must identify the transport route(s) to be used, the hours of operation and quantify the noise impacts. The EPA's publication `*NSW Road Noise Policy*' describes the methods generally used by EPA to determine noise planning levels for road traffic noise in locations of varying sensitivity.

AIR QUALITY AND ODOURS

The EIS must include an Air Quality Impact Assessment (AQIA). The AQIA must identify and describe in detail all possible sources of air pollution and activities/processes with the potential to cause air pollutants including odours and fugitive dust emissions beyond the boundary of any premises proposed to be licenced by an EPL. This should cover both the construction and operational phases of the development. The AQIA should include cumulative impacts associated with existing developments and any developments having been granted development consent but which have not commenced.

The EIS should demonstrate that the facility will operate within EPA's objectives which are to minimise adverse effects on the amenity of local residents and sensitive land uses and to limit the effects of emissions on local, regional and inter-regional air quality.

The EIS must describe in detail the measures proposed to mitigate the impacts and quantify the extent to which the mitigation measures are likely to be effective in achieving the relevant environmental outcomes.

The AQIA must be prepared in accordance with the EPA's "Approved Methods and Guidance for the Modelling & Assessment of Air Pollutants in NSW". The AQIA must describe the methodology used and any assumptions made to predict the impacts. Air pollutant emission rates, ambient air quality data and meteorological data used in the assessment must be clearly stated and justified.

DANGEROUS GOODS and CHEMICAL TRANSPORT, STORAGE and HANDLING

The EIS must outline all details regarding the transport, handling, storage and use of dangerous goods, chemicals and products, including fuel, both on site and with ancillary activities and describe the measures proposed to minimise the potential for leakage or the migration of pollutants into the air, land or waters from the site.

MONITORING PROGRAMS

The EIS should include a detailed assessment of any noise, air quality, water quality or waste monitoring required during the on-going operation of the facility to ensure that the development achieves a satisfactory level of environmental performance and to demonstrate that any activity licenced by an EPL is carried out in an environmental satisfactory manner. The evaluation should include a detailed description of the monitoring locations, sample analysis methods and the level of reporting proposed.

WASTE FACILITIES

The EIS should include:

- 1. Details of the layout of any proposed waste facility, the treatment process and the environmental controls at the facility.
- 2. Details of the quantity and type of liquid and/or non-liquid waste(s) generated, handled, processed or disposed of at the premises. Waste must be classified according to EPA's *Waste Classification Guidelines 2008.*
- 3. Details of liquid waste and non-liquid waste management at the facility, including:
 - the transportation, assessment and handling of waste arriving at or generated at the site;
 - any stockpiling of wastes or recovered materials at the site;
 - any waste processing related to the facility, including reuse, recycling, reprocessing or treatment both on- and off-site;
 - the method for disposing of all wastes or recovered materials at the facility;
 - the emissions arising from the handling, storage, processing and reprocessing of waste at the facility;
 - the proposed controls for managing the environmental impacts of these activities.
- 4. Details of procedures for the assessment, handling, storage, transport and disposal of all **hazardous waste** used, stored, processed or disposed of at the site, in addition to the requirements for liquid and non-liquid wastes.

5. Details of the quantity, type and specifications for all output products proposed to be produced from the facility. The description should include the physical, chemical and biological characteristics (including contaminant concentrations) of those output products as well as relevant accredited standards against which the products would comply. In documenting or describing the composition of output products and/or wastes generated from the proposed facility reference should be made to the relevant EPA resource recovery exemption (http://www.epa.nsw.gov.au/waste/RRecoveryExemptions.htm) or the Waste Classification Guidelines

2008 (http://www.epa.nsw.gov.au/waste/envguidIns/index.htm).

- 6. Details of intended (or potential) end uses for output products from the facility and the relevant product standards which would be used to assess those products against.
- 7. Details of the type and quantity of any chemical substances (including hydrocarbon (oils and fuels, explosives etc.) to be used or stored and describe arrangements for their safe use and storage.

GENERAL WASTE

The EIS should:

- 1. Include a detailed plan for in-situ classification of waste material, including the sampling locations and sampling regime that will be employed to classify the waste, particularly with regards to the identification of contamination hotspots.
- 2. Identify, characterise and classify all waste that will be generated onsite through excavation, demolition or construction activities, including proposed quantities of the waste. Note: All waste must be classified in accordance with EPA's Waste Classification Guidelines.
- 3. Identify, characterise and classify all waste that is proposed to be disposed of to an offsite location, including proposed quantities of the waste and the disposal locations for the waste. This includes waste that is intended for re-use or recycling.

Note: All waste must be classified in accordance with EPA's Classification Guidelines.

- 4. Include a commitment to retaining all sampling and classification results for the life of the project to demonstrate compliance with EPA's Waste Classification Guidelines.
- Provide details of how waste will be handled and managed onsite to minimise pollution, including:
 - a) Stockpile location and management
 - Labelling of stockpiles for identification, ensuring that all waste is clearly identified and stockpiled separately from other types of material (especially the separation of any contaminated and non-contaminated waste).
 - Proposed height limits for all waste to reduce the potential for dust and odour.
 - Procedures for minimising the movement of waste around the site and double handling. .
 - Measures to minimise leaching from stockpiles into the surrounding environment, such as . sediment fencing, geofabric liners etc.
 - b) Erosion, sediment and leachate control including measures to be implemented to minimise erosion, leachate and sediment mobilisation at the site during works. The EA should show the location of each measure to be implemented. The Proponent should consider measures such as:
 - Sediment traps
 - **Diversion banks**
 - Sediment fences

- Bunds (earth, hay, mulch)
- Geofabric liners
- Other control measures as appropriate

The Proponent should also provide details of:

- how leachate from stockpiled waste material will be kept separate from stormwater runoff;
- treatment of leachate through a wastewater treatment plant (if applicable); and
- any proposed transport and disposal of leachate off-site.
- 6. Provide details of how the waste will be handled and managed during transport to a lawful facility. If the waste possesses hazardous characteristics, the Proponent must provide details of how the waste will be treated or immobilised to render it suitable for transport and disposal.
- 7. Include details of all procedures and protocols to be implemented to ensure that any waste leaving the site is transported and disposed of lawfully and does not pose a risk to human health or the environment.
- 8. Include a statement demonstrating that the Proponent is aware of EPA's requirements with respect to notification and tracking of waste.
- 9. Include a statement demonstrating that the Proponent is aware of the relevant legislative requirements for disposal of the waste, including any relevant Resource Recovery Exemptions, as gazetted by EPA from time to time.
- 10. Outline contingency plans for any event that affects operations at the site that may result in environmental harm, including: excessive stockpiling of waste, volume of leachate generated exceeds the storage capacity available on-site etc.

EPA STATUTORY REQUIREMENTS

The EIS should confirm that the proposed activity is listed in Schedule 1 of the *Protection of the Environment Operations Act 1997* (POEO Act) and will therefore require an Environment Protection Licence from EPA.

Please note that this response does not cover biodiversity or Aboriginal cultural heritage issues, which are the responsibility of the Office of Environment and Heritage.

Attachment B – Guidance Material

Title	Web address
	Relevant Legislation
Contaminated Land Management Act 1997	http://www.legislation.nsw.gov.au/maintop/view/inforce/act+140+1 997+cd+0+N
Environmentally Hazardous Chemicals Act 1985	http://www.legislation.nsw.gov.au/maintop/view/inforce/act+14+19 85+cd+0+N
Environmental Planning and Assessment Act 1979	http://www.legislation.nsw.gov.au/maintop/view/inforce/act+203+1 979+cd+0+N
Protection of the Environment Operations Act 1997	http://www.legislation.nsw.gov.au/maintop/view/inforce/act+156+1 997+cd+0+N
Water Management Act 2000	http://www.legislation.nsw.gov.au/maintop/view/inforce/act+92+20 00+cd+0+N
	Licensing
Guide to Licensing	www.epa.nsw.gov.au/licensing/licenceguide.htm
	Air Issues
Air Quality	
Approved methods for modelling and assessment of air pollutants in NSW (2005)	http://www.environment.nsw.gov.au/resources/air/ammodelling05 361.pdf
POEO (Clean Air) Regulation 2010	http://www.legislation.nsw.gov.au/maintop/view/inforce/subordleg+ 428+2010+cd+0+N
	Noise and Vibration
Interim Construction Noise Guideline (DECC, 2009)	http://www.environment.nsw.gov.au/noise/constructnoise.htm
Assessing Vibration: a technical guideline (DEC, 2006)	http://www.environment.nsw.gov.au/noise/vibrationguide.htm
Industrial Noise Policy Application Notes	http://www.environment.nsw.gov.au/noise/traffic.htm
Environmental Criteria for Road Traffic Noise (EPA, 1999)	http://www.environment.nsw.gov.au/noise/traffic.htm
Waste, Chemicals	and Hazardous Materials and Radiation
Waste	
Environmental Guidelines: Solid Waste Landfills (EPA, 1996)	http://www.environment.nsw.gov.au/resources/waste/envguidIns/solidlandfill.pdf
Waste Classification Guidelines (DECC	http://www.environment.nsw.gov.au/waste/envguidIns/index.htm

htm

http://www.environment.nsw.gov.au/waste/RRecoveryExemptions.

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http://www.environment.nsw.gov.au/pesticides/CCOs.htm

2008)

Control Orders

Resource recovery exemption

Chemicals subject to Chemical

Chemical Control Orders (regulated

Title	Web address
through the EHC Act)	
National Protocol - Approval/Licensing of Trials of Technologies for the Treatment/Disposal of Schedule X Wastes - July 1994	Available in libraries
National Protocol for Approval/Licensing of Commercial Scale Facilities for the Treatment/Disposal of Schedule X Wastes - July 1994	Available in libraries
	Water and Soils
Acid sulphate soils	
Acid Sulfate Soils Planning Maps	http://canri.nsw.gov.au/download/
Acid Sulfate Soils Manual (Stone et al. 1998)	Manual available for purchase from: <u>http://www.landcom.com.au/whats-new/the-blue-book.aspx</u> Chapters 1 and 2 are on DP&I's Guidelines Register at: Chapter 1 Acid Sulfate Soils Planning Guidelines: <u>http://www.planning.nsw.gov.au/rdaguidelines/documents/NSW%2</u> <u>OAcid%20Sulfate%20Soils%20Planning%20Guidelines.pdf</u> Chapter 2 Acid Sulfate Soils Assessment Guidelines: <u>http://www.planning.nsw.gov.au/rdaguidelines/documents/NSW%2</u> <u>OAcid%20Sulfate%20Soils%20Planning%20Guidelines.pdf</u>
Acid Sulfate Soils Laboratory Methods Guidelines (Ahern et al. 2004)	http://www.derm.qld.gov.au/land/ass/pdfs/lmg.pdf This replaces Chapter 4 of the Acid Sulfate Soils Manual above.
Soils – general	
Soil and Landscape Issues in Environmental Impact Assessment (DLWC 2000)	http://www.dnr.nsw.gov.au/care/soil/soil_pubs/pdfs/tech_rep_34_n ew.pdf
Managing urban stormwater: soils and construction, vol. 1 (Landcom 2004) and vol. 2 (A. Installation of services; B Waste landfills; C. Unsealed roads; D. Main Roads; E. Mines and quarries) (DECC 2008)	Vol 1 - Available for purchase at <u>http://www.landcom.com.au/whats-new/publications-reports/the- blue-book.aspx</u> Vol 2 - <u>http://www.environment.nsw.gov.au/stormwater/publications.htm</u>
Landslide risk management guidelines	http://www.australiangeomechanics.org/resources/downloads/
Site Investigations for Urban Salinity (DLWC, 2002)	http://www.environment.nsw.gov.au/resources/salinity/booklet3site investigationsforurbansalinity.pdf
Local Government Salinity Initiative Booklets	http://www.environment.nsw.gov.au/salinity/solutions/urban.htm
Water	
Water Quality Objectives	http://www.environment.nsw.gov.au/ieo/index.htm
ANZECC (2000) Guidelines for Fresh and Marine Water Quality	http://www.mincos.gov.au/publications/australian and new zeala nd guidelines for fresh and marine water quality
Applying Goals for Ambient Water Quality Guidance for Operations Officers – Mixing Zones	http://deccnet/water/resources/AWQGuidance7.pdf
Approved Methods for the Sampling and	http://www.environment.nsw.gov.au/resources/legislation/approve

Title	Web address
Analysis of Water Pollutant in NSW (2004)	dmethods-water.pdf
EPA's Environmental Guidelines Use of Effluent by Irrigation 2004	