Project Approval

Section 75J of the *Environmental Planning & Assessment Act 1979*

As delegate of the Minister for Planning and Infrastructure, under delegation from the Minister enforced from 1 October 2011, the Planning Assessment Commission of NSW (the Commission) approves the project application referred to in Schedule 1, subject to the conditions in Schedule 2.

These conditions are required to:

- prevent, minimise, and/or offset adverse environmental impacts;
- set standards and performance measures for acceptable environmental performance;
- require regular monitoring and reporting; and
- provide for the ongoing environmental management of the project.

Garry Payne AM
Member of the Commission

Lindsay Kelly
Member of the Commission

Sydney 24 November 2011 File No: 10/04970

SCHEDULE 1

Application No.:	MP 08_0236
Proponent:	CIC Australia Limited
Approval Authority:	Minister for Planning and Infrastructure
Land:	Lot 12, DP 1164687; Lot 14, DP 1164687; Lot 6, DP 255492; Lot 1, DP 1149329; Lot 1, DP 255492; and Lot 7, DP 592796
Proposal:	Stage 1 of the Googong Township Water Supply Project as described in the EA, including: • a bulk water pumping station; • a water recycling plant to treat sewage from the Googong Township to a standard suitable for non-potable urban re-use and discharge to the environment, and associated pumping station; • two sewage pumping stations; • reservoirs for recycled and potable water; and • rising and distribution mains for potable water, recycled water and sewage.

TABLE OF CONTENTS

DEFINITIONS

BCA	Building Code of Australia
CEMP	Construction Environmental Management Plan
Construction	All pre-operation activities associated with the project other than survey; acquisitions; fencing; investigative drilling or excavation; building/road dilapidation surveys; minor clearing or translocation (except where heritage, threatened species, populations or endangered ecological communities would be affected, unless otherwise approved by the Director General in consultation with OEH); or other activities determined by the Environmental Representative to have minimal environmental impact (e.g. minor access roads and adjustments for services/utilities)
Councils	Queanbeyan City Council and Palerang Council
Department	Department of Planning and Infrastructure
Director-General	Director-General of the Department of Planning and Infrastructure (or delegate)
DPI	Department of Primary Industries
DSEWPaC	Department of Sustainability, Environment, Water, Population and Communities
EA	Environmental assessment titled *Googong Township Water Cycle Project Environmental Assessment*, dated November 2010 and prepared by Manidis Roberts, including the Submissions Report
EEC	Endangered Ecological Community as defined by the *Threatened Species Conservation Act, 1995*
Environmental Representative	Independent person engaged by the Proponent in accordance with condition C17
EP&A Act	*Environmental Planning and Assessment Act 1979*
EP&A Regulation	*Environmental Planning and Assessment Regulation 2000*
EPL	Environment Protection Licence issued under *POEO Act*
Feasible	Feasible relates to engineering considerations and what is practical to build or carry out
Incident	A set of circumstances that causes or threatens to cause material harm to the environment, and/or breaches or exceeds the limits or performance measures/criteria in this approval
Material harm to the environment	Actual or potential harm to the health or safety of human beings or to ecosystems that is not trivial
Minister	Minister for Planning and Infrastructure (or delegate)
Negligible	Small and unimportant, such as to be not worth considering
NOW	NSW Office of Water
OEH	Office of Environment and Heritage
OEMP	Operation Environmental Management Plan
Operation	Operation activities associated with the project, not including commissioning trials of equipment or temporary use of parts of the project during construction
POEO Act	*Protection of the Environment Operations Act 1997*
Project	The development described in the project application and the EA
Project Approval	Approval granted for a project in accordance with Section 75J of the Act
Proponent	CIC Australia Limited
Publicly Available	Available for inspection by a member of the general public (for example available on an internet site or at a display centre)
Reasonable	Reasonable relates to the application of judgement in arriving at a decision, taking into account: mitigation benefits, cost of mitigation versus benefits provided, community views and the nature and extent of potential improvements
Rehabilitation	The treatment or management of land disturbed by the project for the purpose of establishing a safe, stable and non-polluting environment, and includes remediation
Site	The land referred to in Schedule 1
Statement of Commitments	Concept Plan and Project Application Statement of Commitments identified in the Submissions Report
Submissions Report	*Googong Township Water Cycle Project Environmental Assessment Submissions Report,* dated May 2011 prepared by Manidis Roberts and addendum report dated 14 September 2011 by Navin Officer Heritage Consultants

SCHEDULE 2

PART A - ADMINISTRATIVE CONDITIONS

TERMS OF APPROVAL

A1 The Proponent shall carry out the project generally in accordance with the:
(a) EA;
(b) Statement of Commitments; and
(c) conditions of this approval.

Note: the general layout of the project is shown in Appendix1

A2 If there is any inconsistency between the documents in condition A1, the most recent document shall prevail to the extent of the inconsistency. However, the conditions of this approval shall prevail to the extent of any inconsistency.

A3 The Proponent shall comply with any reasonable requirement(s) of the Director-General arising from the Department's assessment of:
(a) any reports, strategies, plans, programs, reviews, audits or correspondence that are submitted in accordance with this approval; and
(b) the implementation of any actions or measures contained in these documents.

LIMITS ON APPROVAL

A4 This project approval shall lapse five years after the date on which it is granted, unless works subject of this approval have commenced before that time.

STAGING

A5 Construction of the project may be undertaken in discrete work packages or stages. Where that occurs, these conditions of approval need only be complied with to the extent that they are relevant to that discrete work package or stage. Prior to the commencement of relevant construction or operation activities, the Proponent shall submit a Staging Report to the Director General which:
(a) describes the stages; and
(b) identifies the relevant conditions of approval for each stage and how these will be addressed across and between the stages of the project.

A6 With the approval of the Director-General, the Proponent may submit any strategy, plan or program required by this approval on a progressive basis.

STATUTORY REQUIREMENTS

A7 The Proponent shall ensure that all licences, permits and approvals are obtained and maintained as required throughout the life of the project. No condition of this approval removes the obligation of the Proponent to obtain, renew or comply with such licences, permits or approvals. The Proponent shall ensure that a copy of this approval and all relevant environmental approvals are available on the site at all times during the project.

COMPLIANCE

A8 The Proponent shall ensure that employees, contractors and sub-contractors are aware of, and comply with, the conditions of this approval relevant to their respective activities.

A9 The Proponent shall be responsible for environmental impacts resulting from the actions of all persons that it invites onto the site, including contractors, sub-contractors and visitors.

PUBLICLY AVAILABLE INFORMATION

A10 Subject to confidentiality, the Proponent shall make all documents required under this approval available for public inspection on request.

DETAILED DESIGN

A11 The detailed design and construction of the project shall be undertaken in consultation with Councils and include consideration of Councils' requirements in relation, but not limited, to:
(a) project staging, easements and certification,
(b) site access, parking and servicing,
(c) safety, security, facilities and amenities,
(d) site and infrastructure maintenance, and
(e) design and development specifications, including relevant Australian and Council codes, standards and specifications.

STRUCTURAL ADEQUACY

A12 The Proponent shall ensure that all new buildings and structures, and any alterations or additions to existing buildings and structures, are constructed in accordance with the relevant requirements of the BCA.

Notes:
- *Under Part 4A of the EP&A Act, the Proponent is required to obtain construction and occupation certificates for the proposed building works; and*
- *Part 8 of the EP&A Regulation sets out the requirements for the certification of the project.*

OBLIGATION TO MINIMISE HARM TO THE ENVIRONMENT

A13 The Proponent shall implement all reasonable and feasible measures to prevent and/or minimise any material harm to the environment that may result from the construction, operation or rehabilitation of the project.

COMMUNITY INFORMATION, CONSULTATION AND INVOLVEMENT

Community Information Plan

A14 Prior to the commencement of construction, the Proponent shall prepare and implement a **Community Information Plan** which sets out the community communication and consultation processes to be implemented during construction and operation of the project. The Plan shall be prepared in consultation with Queanbeyan City Council and to the satisfaction of the Director-General, and include, but not be limited to:
(a) procedures to inform the local community of planned investigations and construction activities, including blasting works (if any);
(b) procedures to inform the relevant community of construction traffic routes and any potential disruptions to traffic flows and amenity impacts;
(c) procedures to consult with local landowners with regard to construction traffic to ensure the safety of livestock and to limit disruption to livestock movements;
(d) procedures to inform the community where work outside the construction hours specified in condition C7, in particular noisy activities, has been approved;
(e) procedures to inform and consult with affected landowners to rehabilitate impacted land;
(f) procedures to inform the community of operational activities, including results of monitoring undertaken in accordance with conditions D7 to D9; and
(g) procedures to inform the community of their rights, including those relevant to the management of visual and noise amenity and the process for lodgement of complaints, as identified under this Approval.

Complaints Procedure

A15 Prior to the commencement of construction, the Proponent shall ensure that the following are available for community complaints for the life of each project related to the subject concept plan approval (including construction and operation) or as otherwise agreed by the Director-General:
(a) a 24-hour telephone number on which complaints about construction and operational activities at the site may be registered;
(b) a postal address to which written complaints may be sent; and
(c) an email address to which electronic complaints may be transmitted.

The telephone number, postal address and email address shall be advertised in a newspaper circulating in the area of the project, on at least one occasion prior to the commencement of construction; and at six-monthly intervals during construction and for a period of two years following commencement of operation of the project. These details shall also be provided on the Proponent's internet site required by condition 3.2 of the associated Concept Plan Approval. The telephone number, the postal address and the email address shall be displayed on a sign near the entrance to the construction site(s), in a position that is clearly visible to the public.

A16 The Proponent shall record details of all complaints received through the means listed in condition A15 of this approval in an up-to-date Complaints Register. The Register shall record, but not necessarily be limited to:

(a) the date and time of the complaint;
(b) the means by which the complaint was made (telephone, mail or email);
(c) any personal details of the complainant that were provided, or if no details were provided, a note to that effect;
(d) the nature of the complaint;
(e) any action(s) taken by the Proponent in relation to the complaint, including timeframes for implementing the action; and
(f) if no action was taken by the Proponent in relation to the complaint, the reason(s) why no action was taken.

The Complaints Register shall be made available for inspection by the Director-General upon request.

A17 The Proponent shall provide an initial response to any complaints made in relation to the project during construction or operation within 48 hours of the complaint being made. The response and any subsequent action taken shall be recorded in accordance with condition A16. Any subsequent detailed response or action is to be provided within two weeks, or as otherwise agreed by the complainant/Director-General.

Compliance Tracking Program

A18 Prior to the commencement of construction, the Proponent shall develop and implement a **Compliance Tracking Program**, to track compliance with the requirements of this approval during the construction and operation of all project and shall include, but not necessarily be limited to:

(a) provisions for periodic reporting of compliance status to the Director-General including at least prior to the commencement of construction of the project, prior to the commencement of operation of the project and within two years of operation commencement;
(b) a program for independent environmental auditing in accordance with AS/NZ ISO 19011:2003 - Guidelines for Quality and/or Environmental Management Systems Auditing;
(c) procedures for rectifying any non-compliance identified during environmental auditing or review of compliance;
(d) mechanisms for recording environmental incidents and actions taken in response to those incidents;
(e) provisions for reporting environmental incidents to the Director-General during construction and operation; and
(f) provisions for ensuring all employees, contractors and sub-contractors are aware of, and comply with, the conditions of this approval relevant to their respective activities.

PART B – SPECIFIC ENVIRONMENTAL CONDITIONS

OPERATION OF PLANT AND EQUIPMENT

B1 The Proponent shall ensure that all the plant and equipment used on site is:
(a) maintained in a proper and efficient condition; and
(b) operated in a proper and efficient manner.

SOIL AND WATER

Water Discharges

B2 Except as may be expressly provided by an Environment Protection Licence for the project, the Proponent shall comply with section 120 of the *Protection of the Environment Operations Act 1997*.

Compensatory Water Supply

B3 The Proponent shall provide a compensatory water supply to any land owner whose water entitlements are adversely impacted (other than an impact that is negligible) as a result of the project, in accordance with the criteria established in the Water Management Plan in condition D8.

The compensatory water supply measures shall provide an alternate water supply for the duration of the impact attributed to the project. The alternate water supply shall at least be of an equivalent quality and quantity to the affected supply and be provided within 24 hours of the loss being identified, or as otherwise agreed by the affected resident/land owner.

If the Proponent is unable to provide an alternative supply of water, then it shall provide reasonable alternative compensation in consultation with the affected land owner. If the Proponent and the land owner cannot agree on the measures to be implemented, or there is a dispute about the implementation of these measures, then either party may refer the matter to the Director-General for resolution.

Sediment and Erosion Control

B4 Erosion and Sediment controls consistent with *Managing Urban Stormwater: Soils and Construction Manual* (Landcom 2004, or its latest version) are to be installed prior to the commencement of soil disturbance and maintained until such time as the disturbed area has been rehabilitated in accordance with the rehabilitation objectives in the CEMP.

Rehabilitation

B5 The Proponent shall carry out rehabilitation progressively, and as soon as reasonably practicable following disturbance in accordance with Condition C20(e).

AIR QUALITY

Odour

B6 The Proponent shall ensure no offensive odours are emitted from the project site, as defined under the *Protection of the Environment Operations Act 1997*.

WASTE MANAGEMENT

B7 The Proponent shall not cause, permit or allow any waste generated outside the site to be received at the site for storage, treatment, processing, reprocessing, or disposal on the site, except as expressly permitted by a licence under the *Protection of the Environment Operations Act 1997*, if such a licence is required in relation to that waste.

B8 The Proponent shall maximise the reuse and/or recycling of waste materials generated on site, to minimise the need for treatment or disposal of those materials outside the site.

B9 The Proponent shall ensure that all liquid and/or non-liquid waste generated by the project is assessed and classified in accordance with *Waste Classification Guidelines* (DECC 2008, or any future guideline that may supersede that document) and where removed from the site is only directed to a waste management facility lawfully permitted to accept those materials.

B10 The Proponent shall ensure that no green waste is burned on site during the life of the project.

BIODIVERSITY

Vegetation Clearing

B11 The Proponent shall limit the clearing of native vegetation to the minimum extent practicable. Details regarding the procedures for clearing vegetation, minimising the extent of clearing and the extent and location of these reductions shall be included in the Flora and Fauna Management Plan prepared in accordance with condition C20.

B12 All hollow bearing trees shall be retained to the greatest extent practicable. Where this is not feasible, trees containing hollows shall be inspected by a suitably qualified ecologist prior to disturbance, and where native fauna are located using the tree hollows, procedures shall be developed and implemented under the guidance of the qualified ecologist to minimise impacts on the native fauna. Details of actions to be taken and measures to monitor their effectiveness shall be included in the Flora and Fauna Management Plan.

Speckled Warbler

B13 Where possible, the removal of trees which form potential habitat for the Speckled Warbler (*Chthonicola sagittata*) shall occur outside of the August to January period breeding season of the species.

If clearing cannot be avoided during this time, the area must be inspected by a qualified ecologist prior to any disturbance to identify potential nesting sites. If a nesting site is observed and it contains young, the area must be retained for at least 3 weeks to allow the young to fledge.

Pink-tailed Legless Lizard Conservation Area

B14 The Proponent shall establish and maintain in perpetuity a dedicated area of land on the project site for the conservation of the Pink-tailed Legless Lizard (*Aprasia parapulchella*) as outlined in the plan prepared in accordance with condition D9 and shown in Appendix 2.

HAZARDS AND RISK

B15 The Proponent shall store and handle all dangerous goods, as defined by the Australian Dangerous Goods Code, strictly in accordance with:

(a) all relevant Australian Standards;
(b) for liquids, a minimum bund volume requirement of 110% of the volume of the largest single stored volume within the bund; and
(c) DECC's *Environment Protection Manual Technical Bulletin - Bunding and Spill Management*.

In the event of an inconsistency between the requirements listed from (a) to (c) above, the most stringent requirement shall prevail to the extent of the inconsistency.

VISUAL AMENITY

Landscape Management Plan

B16 The Proponent shall prepare and implement a Landscape Management Plan for the project. The Plan shall be prepared in consultation with Councils and include, but not necessarily be limited to:

(a) an identification of the project elements which may impact on the visual amenity of the area and potential sensitive receiver locations, including residents of the Googong Township urban development area;

(b) measures to minimise and/or avoid visual amenity impacts to sensitive receiver locations, including:
    (i) landscape design, including a schedule of species to be used in landscaping and revegetation;
    (ii) built elements, including proposed treatments, finishes and materials of exposed surfaces (including colour specifications and samples); and
    (iii) lighting design;
(c) details of the timing and progressive implementation the visual mitigation works; and
(d) procedures and methods to monitor and maintain landscaped or rehabilitated areas.

The Plan shall be prepared and submitted to the Director-General prior to construction, unless otherwise agreed by the Director-General.

Lighting Emissions

B17 The Proponent shall:
(a) take all practicable measures to mitigate off-site lighting impacts from the construction and operation of the project; and
(b) ensure that all external lighting associated with the project complies with *Australian Standard AS4282 – 1997 – Control of the Obtrusive Effects of Outdoor Lighting.*

PART C – PRIOR TO AND DURING CONSTRUCTION

WORK AREAS

C1 Prior to the commencement of construction of the project, the Proponent shall clearly define work areas (including access trails) using the measures outlined in the CEMP under condition C19. All on-site construction movements shall be restricted to these areas to prevent uncontrolled or inadvertent access by vehicles or construction personnel.

SOIL CONTAMINATION

C2 Prior to commencing construction of the project, the Proponent shall investigate the presence and extent of any soil contamination on the site, including but not limited to the sites identified in the EA.

C3 The Proponent shall ensure any areas affected by the project that are potentially contaminated are remediated prior to commencing construction in those areas. All remediation work shall be conducted in accordance with the requirements of the *Contaminated Land Management Act 1997* and *Contaminated Sites: Guidelines for Consultants Reporting on Contaminated Sites* (EPA, 1997).

HERITAGE

C4 The Proponent shall not impact items of Aboriginal or non-Indigenous heritage significance identified in the EA.

C5 In the event of uncovering unidentified Aboriginal objects or relics, work shall cease immediately in the vicinity of the site and the event shall be reported immediately to OEH and the Department. Relevant works shall not recommence until written authorisation from the Director-General to proceed in those areas has been received.

C6 If during the course of construction the Proponent becomes aware of any previously unidentified non-Indigenous heritage object(s), all works likely to affect the object(s) shall cease immediately and the Heritage Council of New South Wales and the Department shall be notified as soon as practicable in accordance with section 146 of the *NSW Heritage Act 1977*. Relevant works shall not recommence until written authorisation from the Director-General to proceed in those areas has been received.

NOISE AND BLASTING

Construction Hours

C7 Subject to conditions C9 and C10, construction works that would generate audible noise at any sensitive receiver shall only be undertaken during the following hours:

(a) 7:00 am to 6:00 pm, Mondays to Fridays, inclusive;
(b) 8:00 am to 1:00 pm on Saturdays; and
(c) at no time on Sundays or public holidays.

Note: this condition does not apply in the event of a direction from police or other relevant authority for safety reasons.

C8 The hours of construction specified under condition C7 may be varied with the prior written approval of the Director-General. Any request to alter the hours of construction shall be:

(a) considered on a case-by-case basis;
(b) accompanied by details of the nature and need for activities to be conducted during the varied construction hours and any other information necessary to reasonably determine that activities undertaken during the varied construction hours will not adversely impact on the acoustic amenity of receptors in the vicinity of the site; and
(c) require that affected residential receivers are informed of the timing and duration of any construction activities approved under this condition at least 48 hours before that work commences.

C9 Any work generating high noise that has impulsive, intermittent, low frequency or tonal characteristics, including jack hammering, line drilling, pile driving, rock hammering, rock

breaking, saw cutting, sheet piling, vibratory rolling but excluding blasting, shall only be undertaken:

(a) between the hours of 8.00 am and 6.00 pm Monday to Friday;
(b) between the hours of 8.00 am and 1.00 pm Saturday; and
(c) in continuous blocks of no more than three hours, with at least one hour respite between each block of work generating high noise impact, where the location of the work is likely to impact the same receivers;

except as otherwise approved by the Director-General. For the purposes of this condition "continuous" includes any period during which there is less than a one hour respite between ceasing and recommencing any of the work the subject of this condition.

C10 Blasting associated with the construction of the project is only permitted during the following hours:

(a) 9.00 am to 5.00 pm, Mondays to Fridays, inclusive;
(b) 9.00 am to 1.00 pm on Saturdays; and
(c) at no time on Sundays or public holidays.

Where compelling safety reasons exist, the Director-General may permit blasting outside of these hours on a case-by-case basis where any request is accompanied by details of the nature and need for blasting outside the approved hours and the measures to be implemented to minimise impacts.

Construction Noise Criteria

C11 The Proponent shall implement all reasonable and feasible noise mitigation measures to minimise noise generated by construction of the project, consistent with the requirements of the *Interim Construction Noise Guidelines (DECC, July 2009)*.

Blasting Criteria

C12 The Proponent shall ensure that blasting and vibration resulting from construction of the project does not cause exceedances of the criteria in Table C1.

Table C1: Blast impact criteria

Location	***Airblast overpressure (dB(Lin Peak))***	***Ground vibration (mm/s)***	***Allowable exceedance***
Residence on privately-owned land	120	10	0%
	115	5	5% of the total number of blasts over a period of 12 months

C13 At least two weeks prior to commencing blasting activities, the Proponent shall notify Council and potentially affected landowners, including details of time, location and frequency of the blasting and providing a contact point for inquiries and complaints.

TRAFFIC AND TRANSPORT

Dilapidation Survey

C14 Prior to the commencement of construction of the project, the Proponent shall assess the condition of roads and footpaths which may be potentially impacted by construction of the project (including over-mass or over-dimensional vehicles), in consultation with the relevant roads authorities.

Operating Conditions

C15 The Proponent shall:

(a) ensure that any measures to restore roads as a result of the construction of the project, are undertaken in a timely manner, to the satisfaction of the relevant road authority and at the full expense of the Proponent;
(b) ensure that adequate signage is provided to inform road users of any change in traffic conditions resulting from construction works; and

(c) undertake all roadworks in consultation with Councils and any relevant road authority.

AIR QUALITY

Operating Conditions

C16 The Proponent shall:
(a) implement best practice air quality management on site, including all reasonable and feasible measures to minimise off-site odour, fume and dust emissions generated by the project;
(b) minimise any visible air pollution generated by the project; and
(c) regularly assess the meteorological forecasting data, and relocate, modify and/or stop activities on site to ensure compliance with the relevant conditions of this approval.

ENVIRONMENTAL MANAGEMENT

Environmental Representative

C17 Prior to the commencement of construction, or as otherwise agreed by the Director-General, the Proponent shall engage a suitably qualified and experienced Environmental Representative(s) whose appointment has been endorsed by the Director-General. The Environmental Representative(s) shall:
(a) be independent of the design, construction and operation personnel;
(b) oversee the implementation of all environmental management plans and monitoring programs required under this approval and advise the Proponent upon the achievement of all project environmental outcomes;
(c) consider and advise the Proponent on its compliance obligations against all matters specified in the conditions of this approval and any other approval, permits and/or licences; and
(d) have the authority and independence to:
(i) recommend to the Proponent reasonable steps to be taken to avoid or minimise unintended or adverse environmental impacts; and
(ii) failing the effectiveness of such steps, to recommend to the Proponent that relevant activities are to be ceased as soon as reasonably practicable if there is likely to be a significant risk of an adverse impact on the environment, until reasonable steps are implemented to avoid such impact.

C18 The Proponent shall act on all recommendations made by the Environmental Representative(s) as soon as practicable, unless otherwise agreed by the Director-General. If the Proponent chooses not to implement recommendations of the Environmental Representative(s), it shall provide written justification of the alternate course of action to the satisfaction of the Director-General within 7 days of receiving the recommendation from the Environmental Representative(s).

Construction Environmental Management Plan

C19 Prior to the commencement of construction, the Proponent shall prepare and implement a Construction Environmental Management Plan (CEMP) to outline environmental management practices and procedures to be followed during construction of the project. The Plan shall be consistent with the *Guideline for the Preparation of Environmental Management Plans* (DIPNR 2004, or its latest revision) and shall include, but not necessarily be limited to:
(a) a description of all relevant activities to be undertaken on the site during construction, including stages of construction where relevant;
(b) details of measures to clearly define work areas (including access trails) using a combination of posts, fencing or markers, and suitably marked up maps, as appropriate.
(c) details of mitigation, management and rehabilitation measures specific to the site that would be implemented, including but not limited to the requirements identified in the documents referred to under condition A1;
(d) statutory and other obligations that the Proponent is required to fulfil during construction including all relevant approvals, consultations and agreements required from authorities and other stakeholders, and key legislation and policies;
(e) a description of the roles and responsibilities for all relevant employees and contractors involved in the construction of the project;

(f) a description of relevant training and induction provisions for ensuring that all employees, contractors and sub-contractors are aware of their environmental and compliance obligations under these conditions of approval;
(g) measures to monitor and manage dust emissions, including dust generated by traffic on unsealed public roads and unsealed internal access tracks;
(h) details of actions to be taken to address identified potential adverse environmental impacts;
(i) details of how the environmental performance of the construction works will be monitored, and what actions will be taken to address identified potential adverse environmental impacts
(j) a complaints handling procedure during construction; and
(k) procedures for the update of the Construction Environmental Management Plan as necessary.

The CEMP shall be prepared in consultation with the relevant authorities and Councils, and submitted for the approval of the Director-General no later than one month prior to the commencement of any construction works associated with the project, or as otherwise agreed by the Director-General. Construction works shall not commence until written approval has been received from the Director-General.

C20 As part of the Construction Environmental Management Plan for the project, prepared under condition C19 of this approval, the Proponent shall prepare and implement the following:

(a) a **Soil and Water Management Plan** to manage water quality impacts and to minimise soil erosion and the discharge of sediments and other pollutants to lands and/or waters during construction. The Plan shall be prepared in consultation with OEH and Councils and shall include, but not necessarily be limited to:
    (i) detailed engineering designs for the recycled water discharge structure;
    (ii) detailed engineering designs and rehabilitation methodology for each category of watercourse crossing;
    (iii) a description of the quantity and source of all water supplies relating to construction, hydro-testing and operation;
    (iv) a description of any dewatering activities associated with groundwater interception and measures to minimise the impacts associated with dewatering activities, including the disposal or reuse of water;
    (v) details on potential occurrence of expansive soils and saline areas within the project site and management and mitigation measures;
    (vi) details of the measures to mitigate the risk of impacting the local groundwater recharge levels (such as the planning of construction works during dry periods and the employment of construction techniques which aim to shorten the time the trenches are left open);
    (vii) a description of measures to minimise soil erosion and the potential for the transport of sediment to downstream waters, including progressive rehabilitation; and
    (viii) monitoring of impacts on water quality and soils;
(b) a **Hazards, Risk and Safety Management Plan** to address:
    (i) the safety of construction workers in the event of a flood, bushfire and any other likely hazard or risk;
    (ii) the management of the risk of fuel spillages and associated activities, with respect to potential groundwater contamination, including an description of designated fuel distribution points; and
    (iii) the safety of the public (such as bushwalkers) near the site during construction, such as installation of signage and fencing as necessary;
(c) a **Traffic Management Protocol** to outline the management of traffic impacts that may occur during construction of the project. The Plan shall be developed in consultation with Councils, the RTA and any other relevant road authority and shall include, but not necessarily be limited to:
    (i) details of traffic routes for heavy vehicles, including any necessary route or timing restriction for oversized loads;
    (ii) measures to verify the condition of roads used by construction vehicles prior to and following construction;
    (iii) details of how the construction of project infrastructure will be managed in proximity to local and regional roads and with respect to sensitive receivers located in close proximity to these roads (such as maintaining access to

property) and any other concurrent works occurring in close proximity to the project, such as the Googong Dam Spillway Remediation Works;

(iv) detailed consideration of measures to be employed to ensure traffic volumes and acoustic and amenity impacts along heavy vehicle routes are minimised;

(v) details of requirements to restore roads used for the construction of the project, including Old Cooma Road and Googong Dam Road; and

(vi) demonstration that all statutory responsibilities with regard to road traffic impacts have been complied with;

(d) a **Noise and Vibration Management Plan** to identify measures to monitor and manage noise and vibration and to identify all feasible and reasonable noise and vibration mitigation measures. The Plan shall be developed in consultation with OEH and Queanbeyan City Council and include, but not necessarily be limited to:

(i) the identification all potentially affected sensitive receivers (such as future residents of the Googong township due to the undertaking of final works associated with the water recycling plant), and noise management levels;

(ii) a review of the assumptions made in Appendix J of the EA to the final determined construction noise levels;

(iii) details of the measures to avoid and/or mitigate the actual noise levels, including the noise mitigation measures identified under section 13.4.4 of the Environmental Assessment;

(iv) an assessment, if blasting is proposed, to calculate the maximum instantaneous charge (MIC) able to be used in order to meet amenity-based ground vibration and overpressure criteria in condition C12;

(v) details of the consultation process for noise mitigation measures with any affected sensitive receivers; and

(vi) details of noise monitoring to be undertaken to manage potentially elevated noise levels;

(e) a **Flora and Fauna Management Plan** to outline measures to protect, and minimise the loss of, terrestrial, riparian and aquatic native vegetation and native fauna habitat as a result of construction of the project. The Plan shall be prepared in consultation with OEH, DSEWPaC and Queanbeyan City Council, and include, but not necessarily be limited to:

(i) procedures for pre-construction surveys to identify key flora and fauna features within and adjacent to the construction area;

(ii) procedures to accurately determine the total area, type and condition of vegetation community to be cleared;

(iii) plan/s showing terrestrial vegetation communities, important flora and fauna habitat areas, EECs, threatened species (Hoary Sunray *Leucochrysum albicans var. tricolor*, Speckled Warbler *Chthonicola sagittata* and Pink-tailed Legless Lizard *Aprasia parapulchella*), weeds and areas to be cleared. The plans shall also identify vegetation adjoining the site which contains important habitat areas and/or threatened species, populations or ecological communities;

(iv) methods to avoid and manage potential impacts on flora and fauna species and their habitat which may be directly or indirectly affected by the project, such as location of fencing to exclude access to sensitive areas, procedures for vegetation clearing or soil removal/stockpiling and procedures for re-locating hollows or installing nesting boxes and managing weeds;

(v) measures for conserving and reusing topsoil;

(vi) procedures to be implemented for controlling weeds and feral pests;

(vii) rehabilitation details and success criteria;

(viii) a program for reporting on the effectiveness of flora and fauna management measures; and

(ix) a procedure to review management methods where they are found to be ineffective;

(f) a **Heritage Management Plan** to manage potential impacts on Aboriginal and non-Indigenous heritage items. The plan shall be prepared in consultation with OEH and include, but not necessarily be limited to:

(i) details of measures to be carried out to avoid impacts to known and potential Aboriginal sites and deposits;

(ii) procedures for dealing with previously unidentified Aboriginal objects (excluding human remains), including:

- halting of works in the vicinity;
- assessment of the significance of the item(s) and determination of appropriate mitigation measures (including when works can re-

commence) by a qualified archaeologist in consultation with registered Aboriginal stakeholders;

- o assessment of the consistency of any new Aboriginal heritage impacts against the approved impacts of the project; and
- o registering of the new site/s in the OEH AHIMS register;

(iii) procedures for dealing with human remains (including halting of works in the vicinity and notification of the NSW Police, OEH and registered Aboriginal stakeholders and not re-commencing any works in the area unless authorised by OEH and the NSW Police); and

(iv) Aboriginal cultural heritage induction processes for construction personnel and procedures for ongoing Aboriginal consultation and involvement.

PART D – OPERATION

NOISE

D1 Noise emitted from the operation of project-related infrastructure shall not exceed 35 dB(A) ($L_{Aeq\ (15min)}$) at any residence on privately-owned land.

Note: Noise generated by the project is to be measured in accordance with the relevant requirements, and exemptions (including certain meteorological conditions), of the NSW Industrial Noise Policy.

WATER QUALITY

Potable Water

D2 Water provided as drinking water to service the Googong Township, as outlined under the documents referred to in condition A1, shall comply with the *Australian Drinking Water Guidelines 2004*.

D3 Ongoing management and monitoring of the supply of the drinking water shall form part of the NSW Drinking Water Monitoring Program.

Recycled Water

D4 Water provided as recycled water to service the Googong Township, as outlined under the documents referred to in condition A1, shall comply with *National Water Quality Management Strategy - Australian Guidelines for Water Recycling: Managing Health and Environmental Risks (Natural Resource Management Ministerial Council, Environment Protection and Heritage Council and Australian Health Ministers' Conference, 2006)*.

Waterway Discharge

D5 The recycled water discharged to the environment shall not exceed the water quality parameters identified in Table D1 below.

Table D1: Effluent Quality Limits

Parameter	Effluent discharge limits to environment	
	Units	**90th Percentile**
BOD	mg/L	10
Suspended Solids	mg/L	10
TN	mg/L	10
TP	mg/L	0.5
TDS	mg/L	700
Faecal Coliforms	cfu/100mL	150
pH		6.5-8.0
Free Chlorine (residual)	mg/L	0.1
Nitrogen – Ammonia	mg/L	2
Oil & Grease	mg/L	2

If the results of water quality monitoring undertaken in accordance with the Water Management Plan in condition D8 indicates that the downstream ambient water quality criteria of the Queanbeyan River is exceeded as a result of the project, then the project shall be adjusted to reduce the concentration of the relevant parameters in the recycled water discharged to the environment.

D6 No recycled water shall be discharged to the environment until at least 12 months of baseline data for the receiving waterways has been obtained and the flow release protocol has been established, in accordance with the approved Water Management Plan in condition D8.

ENVIRONMENTAL MANAGEMENT

Operation Environmental Management Plan

D7 The Proponent shall prepare and implement an Operation Environmental Management Plan (OEMP) for the project, in accordance with *Guideline for the Preparation of Environmental*

Management Plans (DIPNR, 2004) or its latest version. The Plan shall be prepared in consultation with Councils, OEH and NOW and include, but not necessarily be limited to:

(a) identification of all statutory and other obligations that the Proponent is required to fulfil in relation to the operation of the development, including all consents, licences, approvals and consultations;
(b) specific consideration of relevant measures to address any requirements identified in the documents referred to under condition A1;
(c) a management organisational chart identifying the roles and responsibilities for all relevant employees involved in the operation of the project;
(d) overall environmental policies and principles to be applied to the operation of the project;
(e) management policies to ensure that environmental performance goals are met and to comply with the conditions of this approval;
(f) standards and performance measures to be applied to the project, and means by which environmental performance can be periodically reviewed and improved (where appropriate), including what actions will be taken to address identified potential adverse environmental impacts. In particular, the following environmental performance issues shall be addressed in the Plan:
    (i) detailed contingency procedures for dealing with: power failures; sewer overflow following failures at the sewage pumping stations and/or during extended periods of wet weather flows; and structural failures in the sewage and recycled water transfer pipeline infrastructure;
    (ii) noise emissions including measures for regular performance monitoring of noise generated by the project and measures to proactively respond to and deal with noise complaints;
    (iii) air quality impacts, particularly odour;
    (iv) operational traffic impacts, particularly during maintenance, and procedures to restore any damage attributable to the project during the operation phase;
    (v) mosquito control and the potential for algal blooms;
    (vi) impacts of operational activities on the Googong Dam and foreshores area, particularly water quality;
    (vii) hazard and safety and emergency management measures including measures to prevent and control bushfires;
(g) procedures for the periodic review and update of the Operation Environmental Management Plan as necessary;
(h) the Management Plans listed under conditions D8 and D9; and
(i) the environmental monitoring requirements outlined under this approval.

The OEMP shall be submitted for the approval of the Director-General no later than one month prior to the commencement of Operation of the project or within such period as otherwise agreed by the Director-General. Operation activities shall not commence until written approval has been received from the Director-General.

Water Management Plan

D8 The Proponent shall prepare and implement a Water Management Plan for the project to manage potential impacts on surface water and groundwater systems during operation of the project. The plan must be prepared in accordance with *Australian and New Zealand Guidelines for Fresh and Marine Water Quality* (ANZECC & ARMCANZ, 2000), particularly Volume 1, Chapter 5: *Guidelines for Recreational Water Quality and Aesthetics* and Volume 2, section 8.2.3: *Aquatic Ecosystems,* and include:

(a) a **Surface Water Monitoring Program**, including:
    (i) procedures to obtain detailed baseline data on surface water flows and quality in creeks and other waterbodies that could potentially be affected by the project, including relevant parameters and monitoring locations;
    (ii) surface water and stream health impact assessment criteria including trigger levels for investigating any potentially adverse surface water impacts and for the supply of compensatory water;
    (iii) a program to monitor and assess:
        - surface water flows and quality;
        - impacts on water users;
        - stream health and habitat; and
        - channel stability;
(b) a **Groundwater Monitoring Program**, including:

(i) detailed baseline data of groundwater levels, yield and quality in the region, and privately-owned groundwater bores, that could be affected by the project;
(ii) groundwater impact assessment criteria including trigger levels for investigating any potentially adverse groundwater impacts;
(iii) a program to monitor and assess:
- impacts on the groundwater supply of potentially affected landowners;
- impacts on any groundwater dependent ecosystems and riparian vegetation;

(c) a **Recycled Water Flow Release Protocol**, including:
(i) recommended discharge rates based on baseline data of receiving waterways and meteorological conditions;
(ii) the detailed design and operation specifications for the discharge structure/s; and
(iii) procedures for the review and amendment of flow release protocols based on the outcomes of monitoring;

(d) a **Surface and Ground Water Response Plan**, including:
(i) a response protocol for any exceedances of the surface water and groundwater assessment criteria;
(ii) measures to notify and compensate landowners of privately-owned land whose water supply is adversely affected by the project; and
(iii) measures to mitigate and/or offset any adverse impacts on waterways, groundwater dependent ecosystems and/or riparian vegetation; and

(e) an **Irrigation Management Plan** prepared in accordance with relevant guidelines including *Environmental Guidelines: Use of Effluent by Irrigation* (DEC, 2004) and *National Guidelines for Water Recycling: Managing Health and Environmental Risks (Natural Resource Management Ministerial Council, Environment Protection and Heritage Council and Australian Health Ministers' Conference, 2006)*, which must:
(i) include detailed baseline data of the soil properties of the proposed irrigation areas, including salinity levels and a nutrient budget;
(ii) identify any potential off-site risks and impacts and describe measures to minimise any environmental impacts;
(iii) include a protocol for the use of recycled effluent for irrigation including application rates and restrictions; and
(iv) include a program to monitor areas subject to irrigation.

The Water Management Plan and sub-plans shall be prepared in consultation with OEH, NOW, NSW Health and DTIRIS (Fisheries), and be submitted to the Director-General for approval by the end of June 2012 and prior to commencing operation of the project, unless otherwise agreed by the Director-General.

Aprasia Conservation Management Plan

D9 The Proponent shall prepare and implement an Aprasia Conservation Management Plan for the project to provide and maintain habitat for the Pink-tailed Legless Lizard in accordance with condition B14. This plan must be prepared in consultation with OEH and DSEWPaC, and be submitted to the Director-General for approval by the end of June 2012. The plan must:
(a) be prepared or peer reviewed by a suitably qualified ecologist;
(b) be based on the recommendations in the EA and the objectives of the National Recovery Plan for the species;
(c) outline the roles and responsibilities of parties that would implement the plan;
(d) set out the appropriate objectives, actions and milestones for the Proponent, prior to handing over ownership of this land to Queanbeyan City Council;
(e) include:
(i) procedures to survey and mark the boundary of the conservation area and a 20 metre buffer zone;
(ii) procedures for the establishment and maintenance of boundary fencing, including measures to promote kangaroo grazing;
(iii) procedures and success criteria for habitat restoration and weed management;
(iv) procedures to control and monitor access and use of the conservation area by domestic and feral animals;
(v) a community education program;
(vi) procedures to achieve long-term security for the conservation area;
(vii) a program to monitor the Pink-tailed Legless Lizard population within the conservation area; and

(viii) a program which sets out milestone dates for achieving the actions and measures in the plan.

TRAFFIC AND TRANSPORT

D10 Prior to the commencement of operation of the project, the Proponent shall assess the condition of all public roads and footpaths traversed by construction traffic associated with the project (including over-mass or over-dimensional vehicles) in consultation with the relevant road authorities. Should this assessment identify any damage to roads or footpaths attributable to the project, the Proponent shall repair the damage to the satisfaction of the relevant road authority.

D11 Prior to the commencement of operation, the Proponent shall submit to the Director-General details of recommendations made by the relevant road authority and how these have been addressed.

PART E – INCIDENT REPORTING

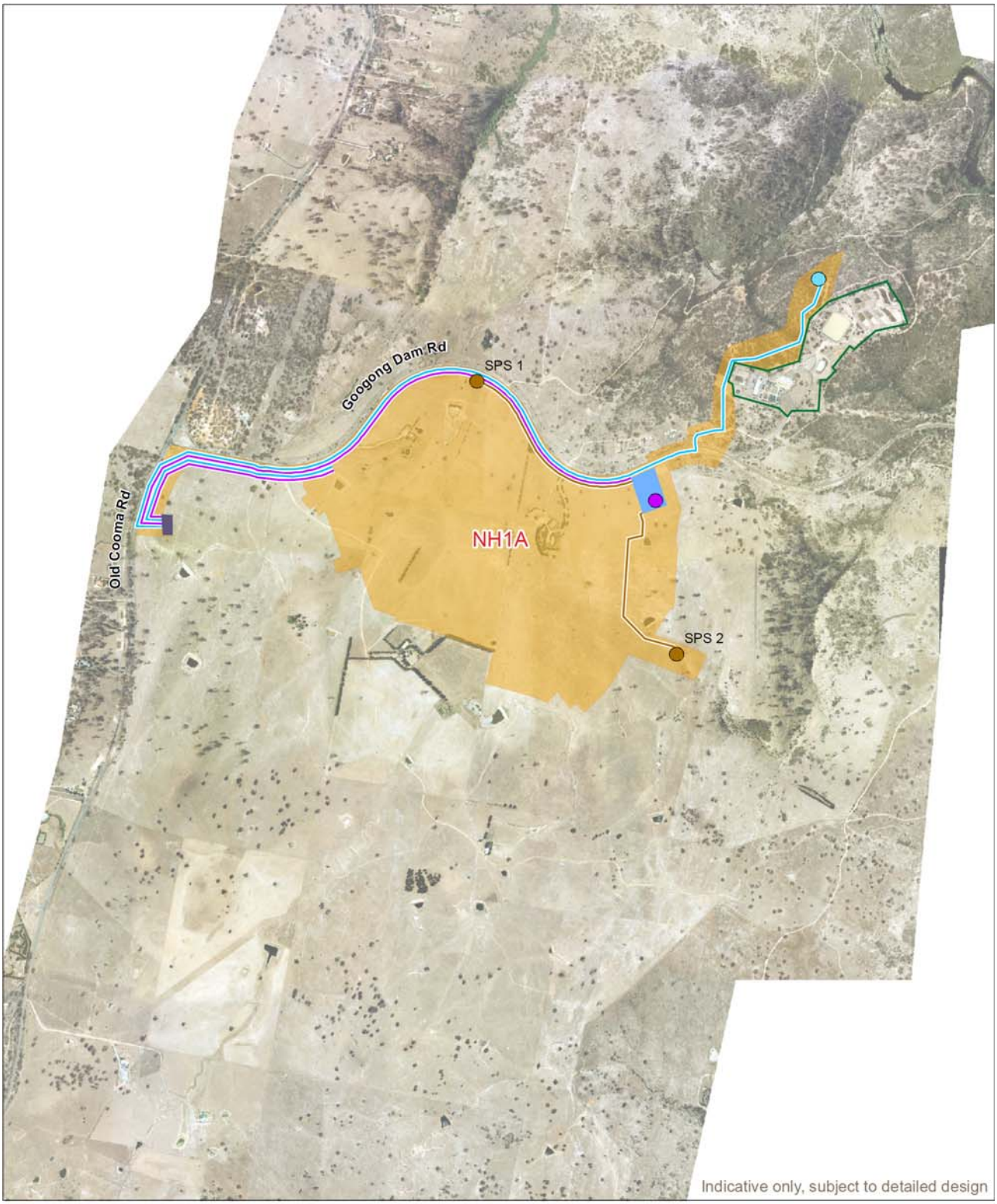
INCIDENT REPORTING

E1 The Proponent shall notify the Director-General and any other relevant agencies of any incident associated with the project as soon as practicable after the Proponent becomes aware of the incident. Within 7 days of becoming aware of the incident, the Proponent shall provide the Director-General and any relevant agencies with a detailed report on the incident.

E2 The Proponent shall meet the requirements of the Director-General to address the cause or impact of any incident, as it relates to this approval, reported in accordance with condition E1 of this approval, within such period as the Director-General may require.

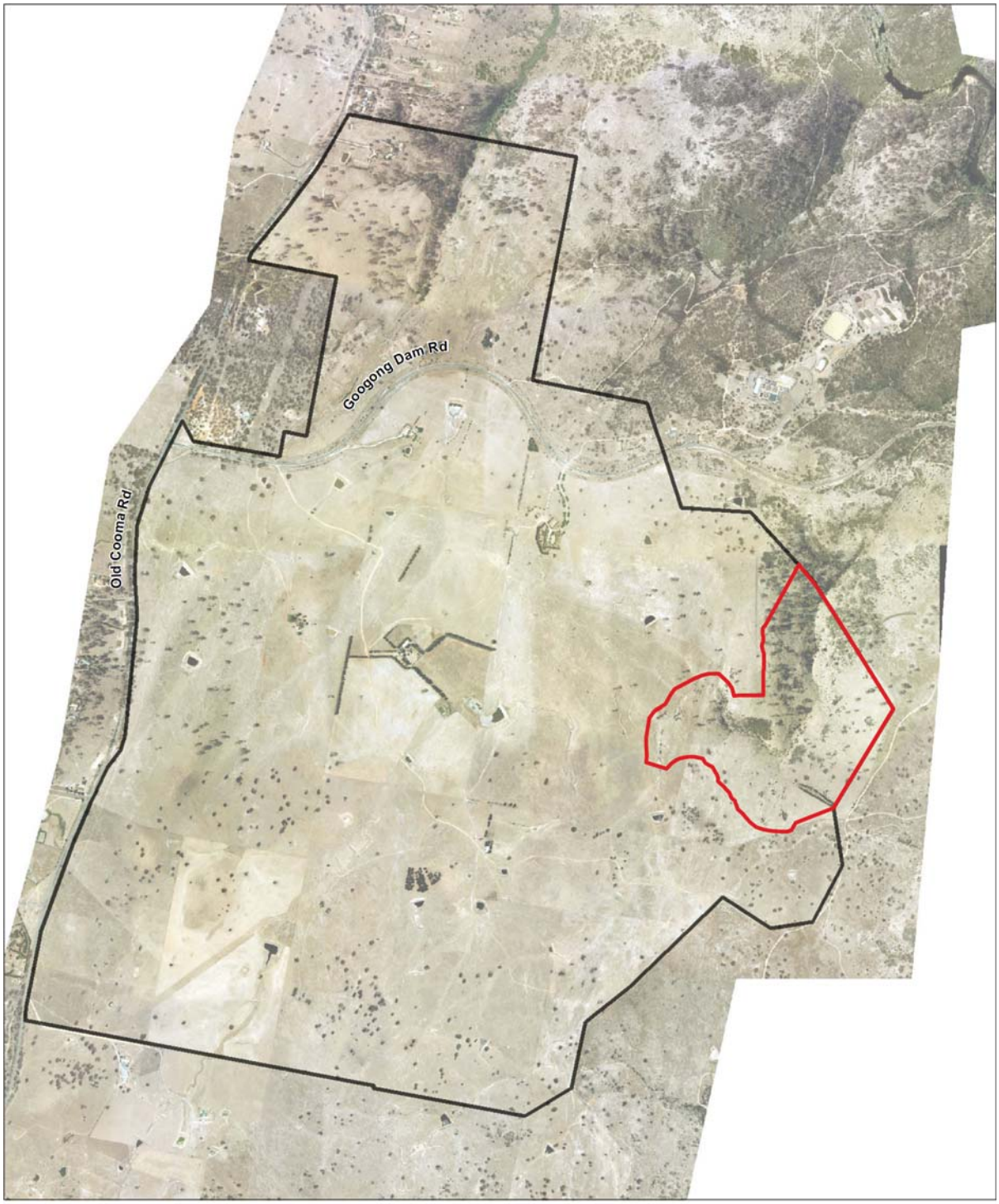
APPENDIX 1

PROJECT LAYOUT PLAN



APPENDIX 2

PINK-TAILED LEGLESS LIZARD CONSERVATION AREA



Googong Aprasia Management Plan

Proponent CIC Australia

Date 29 September 2011

Drawing no. 09096g_EMP

Source

Aprasia conservation area boundary

Googong township boundary

1:20,000

0 150 300 450 600m

Objective	Ref. no.	Commitment	Timing	References
Project detailed design				
Ensure final location and design of all water cycle infrastructure minimise impacts on natural environment and human health.	D1	Any location and/or design changes will be subject to a consistency assessment, informed through a desktop analysis of each of the environmental issues addressed in this EA.	Prior to construction	Chapter 5 and Part B of the EA.
	D2	Where any final location and/or design changes are not generally consistent with the Part 3A approval of the Project, the proponent will apply for modification under Section 75W of the EP&A Act.	Prior to construction	Chapters 3, 5 and Part B of the EA.
	D3	The construction and operation of the Project will comply with Queanbeyan City Council's *Development Specification – Googong*.	Construction and operation	Submission 9.
Construction management				
Put management systems in place for protection of the environment.	C1	A construction environmental management plan (CEMP) will be developed in consultation with relevant agencies to manage the environmental issues assessed in this EA and implement the identified mitigation and management measures where required.	Prior to construction	Chapters 6 and Part B of the EA.
Minimise impacts on human amenity as a result of construction hours.	C2	Construction work will generally be undertaken between the hours of 6.00am and 7.00pm Monday to Friday, and 8.00am to 1.00pm Saturdays. At all other times, construction noise levels will be as agreed with the relevant receiver(s).	Construction	Chapter 5, Section 13.4 and Appendix J of the EA.
Operational management				
Ensure comprehensive monitoring of operation of the water cycle.	OP1	Establishment and location details for monitoring sites will be in accordance with WQ4. Results of all monitoring programs that form part of these Statement of Commitments will be considered in terms of overall environmental impact on a regular basis, including: • The trade-off between potable water savings, reduction in stormwater discharges and increased recycled water discharges. • Relative impacts of excess recycled water discharges compared to impacts on soil and groundwater from recycled water uses. • The timeframe for relative comparisons of impacts of components of the water cycle will be determined in consultation with the relevant government agencies. • The ability to feedback results for further stages of Googong	Operation	Chapters 5 and 7 of the EA.

Objective	Ref. no.	Commitment	Timing	References
Ensure comprehensive monitoring of operation of the water cycle.	OP1	Establishment and location details for monitoring sites will be in accordance with WQ4. Results of all monitoring programs that form part of these Statement of Commitments will be considered in terms of overall environmental impact on a regular basis, including: • The trade-off between potable water savings, reduction in stormwater discharges and increased recycled water discharges. • Relative impacts of excess recycled water discharges compared to impacts on soil and groundwater from recycled water uses. • The timeframe for relative comparisons of impacts of components of the water cycle will be determined in consultation with the relevant government agencies. • The ability to feedback results for further stages of Googong township.	Operation	Chapters 5 and 7 of the EA.
	OP2	Telemetry will be installed on all major water cycle infrastructure to gather operational data.	Operation	Chapter 5 of the EA.
Adaptive management	OP3	Management plans will be reviewed with consideration of the outcomes of monitoring programs: • Additional management and mitigation measures will be implemented, should monitoring identify that the water cycle system is operating outside of modelled or expected parameters.	Operation	Chapter 6 of the EA.
Community and stakeholder consultation				
Ensure effective consultation with community and other stakeholders is continued.	CS1	A combined consultation strategy for community stakeholders and key government agencies will continue to be implemented throughout the Project. The outcomes of ongoing consultation will continue to influence the Project.	Prior to and during construction and operation	Chapter 16 of the EA.
Ensure all affected stakeholders are kept informed of the construction schedule.	CS2	During construction, affected communities will be informed prior to the start of any works in their area and will be notified at regular intervals throughout the construction process according to a project-specific community engagement and stakeholder management plan.	Construction	Chapter 16 of the EA.
Ensure coverage of water cycle issues in the broad community education strategy for the Googong township.	CS3	A community education strategy will be developed, which will focus on minimising environmental and human health risks associated with the use of recycled water.	Prior to and during construction and operation	Chapters 8 and 16 of the EA.

Objective	Ref. no.	Commitment	Timing	References
Water quality and hydrology				
Implement water quality and hydrology management procedures.	WQ1	To reduce risks associated with water quality, soil and water management plans will be developed and implemented for the construction phase, via the CEMP, in accordance with *Managing urban stormwater: soils and construction, Volume 1* (the Blue book).	Prior to and during construction	Chapter 7 of the EA.
Minimise the risk of surface water contamination.	WQ2	A spill management and response procedures will be developed in the CEMP for the construction phase of the Project. These will specify that: • Any fuels and chemicals will be stored to meet relevant standards in bunded or contained areas and a spill kit will be provided at all locations where fuels and/or chemicals are used. • Fuel and chemical storage sites will not be located in the vicinity of any permanent and/or flowing waterway. • The maintenance or refuelling of equipment will not be undertaken within the vicinity (within 150m) of any waterway.	Construction	Chapter 7 of the EA.
Ensure bank stabilisation in construction sites.	WQ3	The CEMP will incorporate measures to ensure that creek banks are stabilised during the construction phase, such as: • Stabilising where required by establishing rocks, sandbags/ matting to prevent scouring, ensuring that they are placed to conform as far as possible with existing contours. • Respreading topsoil over the area from where it was removed.	Construction	Chapter 7 of the EA.

Objective	Ref. no.	Commitment	Timing	References
Monitor impacts on waterways.	WQ4	A monitoring program to assess the potential impacts of the Project on the Queanbeyan River (including water quality, flow, fish migration, macrophytes and macro invertebrate communities) will be undertaken. • Details of the monitoring program will be determined in consultation with relevant government authorities/stakeholders (including the OEH, DPI and, potentially, ACTEW Corporation). Such consultation will ensure the sharing of available data for the Queanbeyan River for comparative and impact assessment purposes. • A new monitoring site within the Queanbeyan River is proposed to measure water quality and aquatic ecology impacts over the medium term. This site will be located near the confluence of Googong Creek and Queanbeyan River (and will be sited to enable comparison with data collected from upstream and downstream sites). • Monitoring will commence approximately 12 months prior to commissioning the water recycling plant.	Prior to and during construction, and during operation	Chapter 7 and Section 11.2 of the EA.
	WQ5	The operation environmental management plan (OEMP) will outline erosion and sediment control measures to protect buffer and riparian vegetation zones, in general accordance with Statement of Commitment WQ3.	Operation	Chapter 7 of the EA.

Objective	Ref. no.	Commitment	Timing	References
Human health				
Ensure recycled water meets all relevant guidelines.	HH1	Recycled water will meet the requirements for non-potable domestic use as defined in the *Australian Guidelines for Water Recycling: Managing Health and Environmental Risks* (NRMMC, EPHC & AHMC, 2006). Recycled water will be appropriately planned and industry accepted management systems put in place to assure appropriate product quality.	Operation	Chapter 8 of the EA.
	HH2	A Recycled Water Risk Management Plan (RWRMP) will be prepared based on the risk management framework outlined in *Australian National Guidelines for Water Recycling – Managing Health and Environmental Risks* (2006). This RWRMP will be a living document that will be refined throughout operation of the recycled water scheme. It will involve: • Developing the RWRMP through hazard identification (for the operation of the recycled water system and use of recycled water). • Identifying the significant human and environmental health risks. • Conducting validation, operational and verification monitoring to determine the success of the following respective components of the scheme: the risk management system, preventative measures, and the achievement of safe and sustainable water recycling. • Completing the RWRMP, based on the monitoring results.	Prior to operation and during operation	Chapter 8 of the EA.

Objective	Ref. no.	Commitment	Timing	References
Reduce risks associated with exposure to recycled water.	HH3	The Proponent will apply the following risk management practices to limit exposures to recycled water: • Installation regulations and codes of practice that include systematic processes to reduce the probability of cross-connections. • Materials codes and regulations that easily discriminate drinking and recycled water plumbing. • Regulations that limit the legal installation and modification of plumbing systems to licensed individuals. • Education on recycled water use and the need to avoid creating cross-connections. • Installation of backflow prevention. • Operational checking (that is, testing of recycled effluent quality following treatment) and connection auditing. • Continue to liaise with relevant stakeholders to ensure awareness and understanding of the Project (including discharges of excess recycled water to the environment) and to address arising issues.	Construction and operation	Chapter 8 of the EA.
Soil				
Ensure proper management of soils.	S1	Soil and water management plans will be developed and implemented for the construction phase, via the CEMP, in accordance with *Managing urban stormwater: soils and construction, Volume 1* (the 'Blue book'). Soil types will be identified and delineated within the study area. Soil management measures will be developed according to soil type and be documented in the CEMP.	Prior to construction	Chapter 9 of the EA.

Objective	Ref. no.	Commitment	Timing	References
Prevent soil erosion and minimise loss of topsoil.	S2	The CEMP will detail erosion and sedimentation control measures, to maintain surface and soil stability at all times during cut and fill excavation activities (also necessary to ensure site safety). Graded soil will be stockpiled separately so that local soils can be recovered for respreading. During restoration and cleanup, the following will be applied in relation to stabilisation of soils: • Reprofiling of the site to achieve soil stability and congruity with the surrounding landscape. This will be done in consideration of the landscape and open space strategy (LOSS) for the Googong township. • Reseeding and the use of geotextile materials as required. • Backfilling of trenches in layers with compaction. • Management and exclusion of site access to assist with site recovery.	Construction	Chapter 9 of the EA
Prevent and manage spills.	S3	To prevent and manage spills, the proponent will: • Implement chemical transport, storage, handling and disposal procedures, in accordance with requirements for dangerous goods, of environmental legislation and industry standards. • Ensure spill response procedures and equipment for containment and recovery are available on site. • Conduct workforce training on the transport, storage, handling and disposal procedures relating to chemicals.	Construction and operation	Chapter 9 of the EA

Objective	Ref. no.	Commitment	Timing	References
Manage potential and/or real soil contamination on site.	S4	To manage soil contamination, the proponent will: • Manage contaminated soil disposal or removal from site in accordance with OEH *Waste Classification Guidelines*. • Conduct further investigations at the newly identified area of concern (AEC – identified as Site 3 in Section 9.3.5 of the EA) prior to construction. An OEH accredited site auditor will provide advice on the need for further investigations at AEC3, if it is to be disturbed by the Project. • Develop a sampling strategy for AEC2 (shown in Section 9.3.5 of the EA) as soon as the existing uses at the site cease, in consultation with a OEH accredited site auditor. If potential or actual contamination is found during earthworks, stop all work in the affected area until a suitably qualified person has inspected the site, the hazard has been assessed and appropriate action has been taken (including delineating areas of concern as required until earthworks can resume safely).	Prior to and during construction	Section 9.3.5 of the EA.

Objective	Ref. no.	Commitment	Timing	References
Ensure minimal impact on soil salinity and groundwater quality	S5	Ensure that appropriate materials are used to mitigate against the corrosive impacts of high salinity. Design, where possible, the salt sensitive urban stormwater drainage system to direct potential saline runoff to a water body that is able to assimilate the expected salt load being applied to the landscape, without adverse impacts on aquatic and riparian ecosystems. Place and design built structures in consideration of existing and potential soil salinity levels. The proposed WRP should be designed to minimise the need for additions of chemicals for phosphorus removal, to minimise salt loading. The Proponent will explore options to switch off the phosphorus removal process during peak irrigation demand periods in accordance with Statement of Commitment OP1. Early stages of Googong township will be used as a trial to better understand the movement of salt in the landscape. It will involve the installation of carefully located piezometers and the monitoring of results, as well as monitoring the effectiveness of pre-emptive measures such as any subsurface drainage system. The results will be used to improve strategies for ensuing stages. Recycled water users will be informed of the specific risks associated with irrigation with recycled water, in the context of developing a complete awareness of the Project and its environmental trade-offs. This will include: • Education on salinity impacts on soil and plant damage and regrowth. • Encouragement to grow salt-tolerant species, particularly in areas considered to be of high risk. Householders will be educated on the benefits of using detergents that are low in phosphorus, sodium and salt – in terms of the impact on recycled water quality. This will form part of the broad community education program.	Prior to and during construction and during operation	Chapter 9 of the EA.

Objective	Ref. no.	Commitment	Timing	References
Groundwater				
Prevent impacts to groundwater recharge.	G1	Timing of trench construction will be monitored and planned to ensure, where practical, the time the trench is open is reduced and during periods of low rainfall.	Construction	Chapter 10 of the EA and Appendix E of the EA.
Minimise groundwater contamination.	G2	Site environmental management measures will be developed and outlined in the CEMP with the purpose of minimising the potential for spills to occur and implementing remedial actions (refer to SG1). These will include: • Mapping unregistered nearby groundwater bores, if identified. • Ensuring that all refuelling, where possible, occurs at designated fuel distribution points. These points will be underlain by compacted earth to prevent the significant loss of fuel to the ground during a spill and will be bunded to contain large spills.	Prior to and during construction	Chapter 10 of the EA and Appendix E of the EA.
Monitor groundwater quality to minimise adverse impacts.	G3	Develop a groundwater monitoring program for the Project in consultation with relevant stakeholders. This program will address the following: • The salt levels in groundwater will be regularly monitored during and after Stage 1 of the Project. • Groundwater samples will be collected from both the shallow and regional aquifers, and soil conductivity (that is, salt) mapping will be carried out where possible in areas of inferred impact. • The monitoring of salt levels in the receiving waters will be indicative of the effectiveness of the stormwater system (refer below).	Operation	Chapter 10 of the EA and Appendix E of the EA. Table 12 of this report.
Minimise impact on drainage.	G4	Develop the layout of infrastructure to reduce the impact on natural surface and subsoil drainage.	Prior to construction	Chapter 10 of the EA and Appendix E of the EA.
Minimise the potential for groundwater mounding.	G5	Construct in accordance with the approved materials and provisions of water supply code (WSA) 03-2002 to minimise leakage from water cycle infrastructure.	Construction	Chapter 10 of the EA and Appendix E of the EA.
Minimise the potential for waterlogging.	G6	The risks associated with waterlogging will be considered and accommodated through the design of the drainage system. Irrigation systems will be designed and scheduled to avoid overwatering.	Prior to construction (for operation)	Chapter 10 of the EA and Appendix E of the EA.

Objective	Ref. no.	Commitment	Timing	References
Minimise salinity impacts on soil and plant growth.	G7	Soil monitoring in low-lying areas, where salt is likely to accumulate, will be undertaken. If salt levels were shown to be increasing, engineered drainage structures to nearby creek lines will be constructed. As a preventative measure, to avoid future bare soil patches and erosion, salt-tolerant landscaping will be used in low-lying areas.	Operation	Chapter 10 of the EA and Appendix E of the EA.
Further investigate the groundwater environment, potential changes to recharge, and likelihood of long-term impacts.	G8	Undertake the groundwater monitoring program as outlined in Table 12 of this report.	Prior to and during construction and operation	Chapter 10 of the EA. Appendix E of the EA. Table 12 of this report.
Terrestrial flora and fauna				
Protect native flora and fauna.	F1	A flora and fauna management plan will be prepared prior to construction as part of the CEMP. All feasible and reasonable measures will be undertaken to minimise the impact of construction on native vegetation and fauna including: • Minimising the disturbance of native flora and hollow-bearing trees. • Implementing weed control measures. • Revegetating with endemic species. • Minimising soil disturbance. • Implementing clearing protocols to protect flora and fauna.	Prior to and during construction	Chapter 11 of the EA and Appendix F of the EA.

Objective	Ref. no.	Commitment	Timing	References
Protect threatened flora and fauna.	F2	The Flora and fauna management plan (within the CEMP) will contain specific additional measures for threatened species, including: • Only approved works will be undertaken within 5m of a threatened species and exclusion fencing will be erected around threatened flora species and threatened fauna habitats and maintained in place until such time as construction works are completed, unless otherwise approved by OEH. • Site-specific management measures will be implemented for the protection of the Pink-Tailed Worm Lizard near the site proposed for SPS2 and at Hill 800, and for the Hoary Sunray near the BWPS site, including exclusion zones, signage and pre-construction surveys. These works will be undertaken under the supervision of an appropriately qualified ecologist.	Prior to and during construction	Section 11.1 of the EA and Appendices F and P of the EA.
Protect terrestrial flora and fauna.	F3	An Operational environmental management plan (OEMP) will be prepared for the Project, and implemented. This will detail emergency, spill and maintenance procedures as well as monitoring and reporting regimes as they relate to the protection of terrestrial and aquatic ecology.	Operation	Chapter 11 of the EA and Appendix F of the EA.
Aquatic ecology				
Avoid impacts on and monitor changes to aquatic ecology.	A1	Aquatic ecology impacts are considered under WQ4. A water quality and aquatic ecology monitoring program will be developed to monitor construction and operation impacts of the Project on waterways (refer to WQ4 for further details). The monitoring program will include siting of the aquatic ecology monitoring location to ensure viable comparison with historical and other recent river ecology data. Riparian vegetation, weeds and invasive scrub will be managed within the Googong township site. This will include surveying, mapping and managing invasive species.	Prior to and during construction, and during operation	Chapter 7 and Section 11.2 of the EA.
Minimise impacts on aquatic habitats.	A2	Riparian zones within the Googong township site will be revegetated with species of local providence to increase stability. Further measures to ensure minimal impact on aquatic habitats are addressed in Statement of Commitments WQ1-WQ5.	Construction	Chapter 7 and Section 11.2 of the EA.

Objective	Ref. no.	Commitment	Timing	References
Indigenous (Aboriginal) and non-indigenous cultural heritage				
Indigenous heritage				
Avoid and/or minimise impacts on indigenous heritage.	H1	Generally, indigenous heritage on the site will be managed in accordance with Appendix G of the EA, including the four identified indigenous heritage sites. The avoidance, relocation or disturbance of any Aboriginal heritage sites and PADs will be in accordance with relevant guidelines and permits. An archaeologist and representatives of the local Aboriginal community will conduct any relocation works.	Prior to and during construction	Chapter 12 of the EA and Appendix G of the EA.
Protect unknown indigenous heritage	H2	Should any unknown indigenous heritage items be located during the proposed works by the site environmental officer or any other construction staff, all work will cease in the vicinity of the find until specialist indigenous heritage advice is received.	Construction	Chapter 12 of the EA and Appendix G of the EA.
Non-indigenous heritage				
Avoid and/or minimise impacts on non-indigenous heritage.	NH1	Generally, non-indigenous heritage on the site will be managed in accordance with Appendix G of the EA. Construction and maintenance activities will be managed to avoid structural damage on heritage items as a result of vibration. Construction activities will be excluded from the identified heritage sites. However, if impacts are unavoidable then a further heritage assessment of the impacted site(s) will be conducted.	Prior to and during construction	Chapter 12 of the EA and Appendix G of the EA.
Continue to investigate heritage values of site GH14 (refer to Section 7.3 of Appendix G of the EA).	NH2	Investigation into the value of site GH14 is continuing. The results of this study will inform the approach to mitigation of impacts to non-indigenous heritage.	Prior to construction	Chapter 12 of the EA and Appendix G of the EA.
Protect unknown non-indigenous heritage items.	NH3	If any material of potential archaeological significance is unearthed, work will cease in the vicinity of the find until specialist heritage advice has been obtained. The NSW Heritage Council will be notified of the discovery of any relics.	Construction	Chapter 12 of the EA and Appendix G of the EA.

Objective	Ref. no.	Commitment	Timing	References
Traffic, transportation and access				
Minimise disturbance to local traffic and amenity during construction.	T1	A traffic management plan will be prepared prior to the commencement of construction. It will detail traffic arrangements for the construction phase of the Project. This will include: • The use of standard mitigation and management controls. • Planning of vehicle use to maximise efficiency and reduce vehicle trips. • An education program for construction personnel in relation to local traffic arrangements (as per the plan) and local conditions (such as the intersection of Googong Dam Road and Old Cooma Road). • Access to properties and provisions for temporary access. A traffic control contractor will be engaged to implement the traffic management plan (such as partial road closures), where necessary specialist advice is required.	Prior to and during construction	Section 13.1 of the EA and Appendix H of the EA.
Manage traffic, transportation and access with local authorities.	T2	Traffic, transportation and access will be managed in consultation with relevant stakeholders, including Queanbeyan City Council and the RTA, including impact mitigation and management measures to address partial road closures, access to properties and provisions for temporary access and re-instatement.	Prior to and during construction	Section 13.1 of the EA and Appendix H of the EA.
Minimise the impact of transportation.	T3	Any oversized or overweight loads will be transported in accordance with RTA guidelines and requirements.	Construction	Section 13.1 of the EA and Appendix H of the EA.
Minimise impact of traffic and access on stakeholders and the local community.	T4	Councils, property owners and local community members will be informed of any potential loss of or disruption to access to properties, roads and/or pathways. Appropriate temporary measures to either provide alternative access or to reinstate access at the end of each workday will be negotiated with relevant parties.	Construction	Section 13.1 of the EA and Appendix H of the EA.
Manage operational traffic, transportation and access to minimise impacts on local conditions.	T5	A Traffic management plan will be prepared for the operation and maintenance of key water cycle infrastructure, which will include: • Standard management and mitigation measures for managing vehicle movements at water cycle infrastructure sites. • Timing of truck movements for deliveries and disposal, and parking arrangements.	Operation	Section 13.1 of the EA and Appendix H of the EA.

Objective	Ref. no.	Commitment	Timing	References
Waste generation and management				
Practice responsible resource management during construction.	W1	The CEMP will address the principles of the resource management hierarchy (avoidance, resource recovery and disposal in that order) and disposal will be to a licensed waste facility. The CEMP will include the following: • Procedures to classify waste types in accordance with the Waste Classification Guidelines and NSW legislative requirements. • Resource recovery and re-use strategies for each waste type. • Details of treatment and storage of on-site waste. • Procedures and disposal arrangements for relevant materials. • Reporting and recording requirements for all waste movements, allowing determination of recycling and re-use levels achieved.	Construction	Section 13.2 of the EA.
Practice responsible resource management during operation.	W2	Operational management of wastes will be incorporated into the OEMP for the key sites. Some inclusions are procedures for: • The collection and transportation of grit and screenings from the WRP to an appropriately licensed facility. • Treatment and handling of biosolids, suitable for use in agriculture, forestry, soil and site rehabilitation (Grade B), in accordance with OEH's *Environmental Guidelines on the Use and Disposal of Biosolids Products* (2007). • Management and monitoring of the discharge of treated effluent (recycled water) during commissioning and verification phases of the WRP operation. • Waste management for putrescible and recyclable wastes generated from the WRP and other water cycle infrastructure. • Procedures for the collection and dewatering of any solid matter removed through maintenance activities of water cycle infrastructure, and transportation and disposal off site. • Vehicle routes, and the timing of trips, associated with waste management, in consideration of the traffic management plan.	Operation	Section 13.2 of the EA and Appendix B of the EA.

Objective	Ref. no.	Commitment	Timing	References
Air quality				
Ensure detailed design and urban layout of the Googong township meet air quality requirements for odour.	AQ1	The dispersion modelling undertaken as part of the Googong New Town WRP Odour Impact Assessment will be validated at a later stage in the design, for the ultimate development. This will include consideration of: • Site-specific meteorological data, collected at the WRP site for at least 12 months prior to commissioning. • Site specific odour data collected during and following commissioning, prior to the residential development of the immediate area west of the WRP.	Prior to and during construction, and during operation of Stage 1 of the Project.	Section 13.3 of the EA and Appendix I of the EA.
Minimise odour impacts of WRP and SPS at nearby receivers.	AQ2	Odour control facilities at the SPSs and the WRP will be installed as detailed in the EA (refer to Sections 4.4.2 and 5.13 of Appendix B).	Construction	Section 13.3 of the EA and Appendices B and I of the EA.
Monitor, verify then act on odour complaints.	AQ3	Odour complaints will be registered and investigated. Verified odour issues will be addressed with engineering, operational or other mitigation and management measures.	Operation	Section 13.3 of the EA.
Minimise the impact of construction activities on dust generation.	AQ4	The CEMP will include typical dust suppression measures. Nuisance dust will be minimised by: • Reducing speed limits during high dust conditions. • Clearing vegetation and topsoil only within the designated footprint. • Progressive reinstatement of disturbed areas. • Employment of water trucks to reduce dust in dry, windy conditions.	Construction	Section 13.3 of the EA.
Minimise dust generated by construction activities such as blasting.	AQ5	Blasting will be conducted at appropriate times, with consideration of site conditions and sensitive receivers.	Construction	Section 13.3 of the EA.
Manage construction activities according to weather conditions to minimise the potential for dust storms.	AQ6	Working practices will be modified during periods of high winds by limiting the use of some machinery, particularly when in close proximity to dwellings, and reducing vehicle travel speeds.	Construction	Section 13.3 of the EA.
Avoid adverse impacts on air quality due to smoke.	AQ7	The burning of material on site will be prohibited, except under the instruction of fire services.	Construction	Section 13.3 of the EA.

Objective	Ref. no.	Commitment	Timing	References
Minimise emissions from vehicle use.	AQ8	Vehicles will be well maintained to ensure emissions are kept to the minimum practicable.	Construction	Section 13.3 of the EA.
Noise and vibration				
Minimise the noise impact associated with construction.	N1	Construction noise and vibration management strategies will be outlined in the CEMP. Measures will include the overall construction times (refer to C2) as well as the following: • Construction noise goals. • Liaising with community to advise on likely timing and duration of noisy activities. • Procedures for resolving complaints received from residents and landowners and dealing with exceedances (including the appointment of a liaison person to maintain relationships between the community and the construction contractors in accordance with AS 2436:1981 *Guide to noise control on construction, maintenance and demolition sites*). • Using noise abatement measures (physical and managerial) where reasonable and feasible. • Procedures for liaising with the relevant agencies to discuss the need to construct outside of regular hours, for specific cases.	Construction	Section 13.4 of the EA and Appendix J of the EA.
Assess the potential for vibration impacts should blasting be required.	N1A	Should blasting at the WRP or SPS sites be necessary based on geotechnical information and construction methodology, a construction vibration assessment will be undertaken in accordance with *Assessing Vibration: A Technical Guideline* (DECC, 2006) to determine any additional management measures required for blasting activities.	Construction	Section 13.4 of the EA and Appendix J of the EA.
Meet noise requirements near the WRP site boundary during operations.	N2	The acoustic treatments specified for the WRP components, as outlined in Appendix J, will be implemented and then reviewed for effectiveness following noise measurement verification.	Construction and operation	Section 13.4 of the EA and Appendix J of the EA.

Objective	Ref. no.	Commitment	Timing	References
Hazards and risks				
Manage the operational risks associated with storage and delivery of chemicals.	R1	Measures typical of facilities of the nature and size of the Project will include: • Storing relevant chemicals below threshold quantity levels. • Undertaking activities in accordance with relevant MSDS's. • Installing bunded areas for the storage and delivery of chemicals in accordance with AS 3780:2008 *The storage and handling of corrosive substances* and the relevant MSDS's. • Developing and implementing appropriate procedures for delivery, handling and accidental spills of chemicals.	Operation	Section 13.5 of the EA and Appendix K of the EA.
Manage risks in emergency and/or maintenance situations at the key infrastructure.	R2	The OEMP and RWRMP will outline the management of emergency situations for all key water cycle infrastructure. For emergency or maintenance events associated with the WRP, the following will be implemented/installed, and will include measures such as: • Telemetry at all key infrastructure (eg SCADA). • An alarm system. • Backup procedures should the power to infrastructure be interrupted. • First flush tank at the WRP and wet well emergency storage at the SPS's. • Overflows at the WRP and the SPS's.	Operation	Section 13.5 of the EA.

Objective	Ref. no.	Commitment	Timing	References
Visual amenity				
Minimise visual impact by maintaining existing vegetation where practical.	V1	At relevant sites, existing vegetation will be maintained where practical and where appropriate. Additional vegetation will be planted along site boundaries to obscure views of infrastructure from sensitive receivers.	Construction and operation	Section 13.6 of the EA and Appendix L of the EA.
Minimise the visual impact of the reservoirs and access road (located on Hill 800).	V2	Visual impact of the reservoirs will be minimised through painting the structures a colour that will be chosen as the most compatible and/or appropriate with the surrounding environment and proposed Googong township. The landscaping approach for the reservoirs and associated access road will ensure minimal visual impact by: • Achieving the most appropriate finished landform profile of the top of the hill that integrates the reservoirs. • Detailing siting and design of any elements over and above the reservoirs to minimise visibility (eg plant equipment, fencing, signage and lighting). • Ensure the access road alignment is a careful balance of limited visible road profile and minimised cutting/embankment visibility where following contours. • Considering the location and extent of tree groups to best mitigate visual impacts. • Considering soil and microclimate factors and amelioration to ensure healthy and rapid tree growth.	Construction and operation	Section 13.6 of the EA and Appendix L of the EA.