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Permit, licence or approval taken to have been issued	Land Use and Development Permit for the activity (Water supply pipeline and associated infrastructure - West Tamar municipality)
Act pursuant to which the permit, licence or other approval is taken to have been issued in relation to the conditions contained in this schedule	<i>Land Use Planning and Approvals Act 1993</i> and <i>Environmental Management and Pollution Control Act 1994</i>
Person, body or State Service Agency responsible for the enforcement of the conditions contained in this schedule	Part 2 – West Tamar Council Part 3 – Director of Environmental Management

Part 1 – General Definitions

Unless the contrary intention is expressed, words and expressions used in these conditions have the meaning given to them in this part, in the *Environmental Management and Pollution Control Act 1994* and in the *Land Use Planning and Approvals Act 1993*. If there is any inconsistency between a definition in these conditions and the Acts, then the definition in these conditions prevails to the extent of the inconsistency.

activity means the establishment and operation of a raw water pipeline and associated infrastructure (including intake infrastructure from Lake Trevallyn, a pump station and balance/control tank) located generally within the construction corridor extending from Lake Trevallyn to the low water mark on the eastern bank of the Tamar River adjacent to the Newnham Campus of the University of Tasmania within the Municipality of West Tamar, as described in the DIIS and further information;

associated infrastructure includes, but is not necessarily limited to, roads, substations, cables, underground or overhead powerlines, control buildings, transformers, gas and water pipelines, hazardous materials storage facilities and concrete batch plants;

construction corridor means the area 10 metres either side of the centre of the line defined by the ArcView files titled:

- (a) CentreLine_WaterPipeline_Easement_070802.dbf;
- (b) CentreLine_WaterPipeline_Easement_070802.prj;
- (c) CentreLine_WaterPipeline_Easement_070802.sbn;
- (d) CentreLine_WaterPipeline_Easement_070802.sbx;
- (e) CentreLine_WaterPipeline_Easement_070802.shp; and
- (f) CentreLine_WaterPipeline_Easement_070802.shx,

created on 2 August 2007 and submitted by Mr Greg Stanford of Gunns Limited to the Department of Tourism, Arts and the Environment via email on 6 August 2007 and located within the Municipality of West Tamar. The construction corridor also includes additional areas required for undertaking the activity approved in writing by

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the Director, including the area required for the Lake Trevallyn pump station and water inlet infrastructures as generally indicated on Figure 2 of Appendix 44 of the DIIS, the balance/control tank, extra workspace and changes of construction corridor location. The construction corridor is generally indicated on Figure 1-1 of Volume 1A of the DIIS;

DIIS and further information means the DIIS as well as the documents submitted to the Tasmanian Government identified in Annex D1.

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Part 2 – Planning Conditions

SECTION 1 – DEFINITIONS

In this part, unless the contrary intention is expressed:

construction activity means an activity on the land associated with the construction phase of the activity (which includes vegetation clearance, road construction, related infrastructure and rehabilitation);

contaminated drainage means drainage where any chemical substance or waste has been added at or above background level and represents, or potentially represents, an adverse health or environmental impact;

Council means the West Tamar Council established under section 18 of the *Local Government Act 1993*;

related infrastructure includes, but is not necessarily limited to, roads, substations, cables, underground or overhead powerlines, control buildings, transformers, hazardous materials storage facilities and concrete batch plants;

road authorities means the West Tamar Council in relation to roads for which it has responsibility and the Department of Infrastructure, Energy and Resources in relation to roads for which it has responsibility.

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SECTION 2 - CONDITIONS

- 2.1 The person responsible shall ensure that all use and development is to be generally located within the construction corridor, except:
- (a) where there is a need identified by the person responsible to locate the use and development outside the construction corridor, the Council may permit the use and development to be located outside the construction corridor provided that:
 - i) there is no practicable or expedient alternative other than to provide for the use and development outside the construction corridor; and
 - ii) it is in the public interest to do so;
 - (b) where the person responsible seeks to locate the use and development outside the construction corridor, the person responsible is to provide the Council with:
 - i) a plan which accurately identifies where the use and development is to be located;
 - ii) a plan identifying each parcel of land the use and development is within or passes through; and
 - iii) a statement of the reasons why the use and development cannot be located within the construction corridor;
 - (c) in determining whether it is in the public interest to allow the use and development outside the construction corridor, the Council must have regard to:
 - i) whether the person responsible could reasonably have avoided the need to locate the use and development outside the construction corridor, by better planning or otherwise; and
 - ii) the public interest in the timely completion of the development; and
 - iii) the potential effect upon the environment if the use and development is located outside the construction corridor after obtaining the advice of the Director of Environmental Management or of the Board of Environmental Management and Pollution Control; and
 - iv) the potential effect upon archaeological, architectural, cultural, historical, scientific, social or technical values if the use and development is located outside the construction corridor after obtaining the advice of Heritage Tasmania; and
 - v) the potential effect on land use if the use and development is located outside the construction corridor; and
 - (d) the Council may decline to allow the use and development outside the construction corridor unless the person responsible pays to the Council an amount to cover the costs and expenses

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which have been or may be incurred by the Council or any person in connection with the assessment of whether to permit the use and development outside the construction corridor.

2.2 The person responsible shall obtain conditional approval from the Council's Technical Services Manager for each crossing of a local road prior to the commencement of works where the following applies:

- (a) open or break up the soil or pavement of a local highway;
- (b) make a drain leading to a local highway;
- (c) put or place a pipe or make a drain leading into a sewer or drain or other work of the Council in or under a local highway;
- (d) make an excavation, vault or cellar in or under a local highway; and
- (e) install, under a local highway, pipelines, pipe systems.

The following must be adhered to where conditional approval is granted:

- (f) except as may be provided otherwise by another condition in this Schedule, the person responsible must meet all of the costs of the work including any costs incurred by the Council by reason of the proposal to carry out the work or the carrying out of the work;
- (g) before the work starts, the Council must, on demand, provide the person responsible with a free copy of all relevant records in the Council's possession regarding the nature, location and depth of any infrastructure associated with other utility services that may be affected by the work;
- (h) the person responsible must meet the cost of any claims or proceedings arising from any damage that the work may cause to infrastructure associated with other utility services, unless:
 - i) records given to the person responsible pursuant to condition 2.2(g) did not indicate the presence of the damaged infrastructure; or
 - ii) records given to the person responsible pursuant to condition 2.2(g) did not accurately show the location and depth of the damaged infrastructure;
- (i) the person responsible must provide the Council's Technical Services Manager at least 14 days notice in writing of its intention to start the work;
- (j) the person responsible must, in carrying out the work, comply with the applicable road traffic management standards contained in *General Specifications G2 – Contract Management Plan* published by the responsible Department in relation to the *Traffic Act 1925* or in any publication issued by that Department to replace that publication;
- (k) unless the Council's Technical Services Manager and the person responsible agree to allow trenching, the person responsible must use trenchless technology in carrying out the work wherever it is reasonably practicable to do so;

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- (l) on completion, the person responsible must restore the local highway;
- (m) if the Council's Technical Services Manager and the person responsible agree before completion that the local highway should be restored to a condition that is better than the condition it was in immediately before the work was carried out and also agree on compensation for such betterment, the local highway must be restored to the condition specified in that agreement;
- (n) in any other case, the local highway must be restored to the condition it was in immediately before the work was carried out;
- (o) the person responsible must ensure that the restoration work, including any associated excavation and backfilling of trenches, complies with the municipal standards;
- (p) notwithstanding the other conditions contained in this clause, the Council's Technical Services Manager may consent to a person other than the person responsible carrying out the restoration work;
- (q) the person responsible must meet the cost of any emergency repairs that need to be made to the local highway by or on behalf of the Council because of a failure by the person responsible to comply, or comply fully, with the conditions 2.2(l) through (p);
- (r) after the work starts, the person responsible must provide the Council's Technical Services Manager with a progress report on the work as soon as practicable after each 14-day period if the work proceeds beyond that number of days;
- (s) within 14 days after completion, the person responsible must provide the Council with a report stating that:
 - i) the work has been completed; and
 - ii) all applicable municipal standards have been complied with; and
 - iii) any standards for the work that were agreed between the person responsible and the Council have been complied with;
- (t) the person responsible must compile and keep accurate records of the work, showing the nature, location and depth of the infrastructure;
- (u) the person responsible must, on demand, provide the Council with a free copy of all or any of the records;
- (v) the person responsible must meet the cost of any damage that may be caused to the infrastructure by routine maintenance or rehabilitation work carried out by or on behalf of the person responsible in the work zone if, immediately before the maintenance or rehabilitation work started:
 - i) the records required to be compiled and kept under condition 2.2(t) did not indicate the presence of the damaged infrastructure; or

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- ii) the location and depth of the damaged infrastructure was not accurately shown in those records; and
 - (w) the Council must meet the cost of any damage that may be caused to the infrastructure by routine maintenance or rehabilitation work carried out by or on behalf of the Council in the work zone if, immediately before the maintenance or rehabilitation work started:
 - i) the records required to be compiled and kept under condition 2.2(t) indicated the presence of the damaged infrastructure; and
 - ii) the location and depth of the damaged infrastructure was accurately shown in those records.

- 2.3 The person responsible will:
 - (a) install pipe line markers:
 - i) on both sides of the road crossings;
 - ii) on both sides of railway crossings;
 - iii) on both sides of significant river and stream crossings;
 - iv) at all fences;
 - v) at all utility crossings; and
 - vi) at all bends in the pipe; and
 - (b) erect signs at intervals no greater than 500 metres and must be within line of sight. Where the construction corridor closely parallels a road or power line the spacing will be no greater than 200 metres; and
 - (c) markers will be visible along the Right of Way in either direction.

- 2.4 In the interests of fire safety:
 - (a) an Emergency Plan for the site is to be prepared and maintained to the satisfaction of the Tasmania Fire Service and the Council;
 - (b) a defensible space plan is to be prepared and maintained to the satisfaction of the Tasmania Fire Service for all relevant developments at risk of bushfire.

- 2.5 The person responsible must ascertain the location of all infrastructure in the vicinity of the proposed construction corridor prior to the commencement of the construction activity. The person responsible must repair and reinstate any damage done to infrastructure to the satisfaction of the owner of the infrastructure.

- 2.6 The person responsible must negotiate with the affected private land owners a legal easement for the proposed construction corridor as well as the right to enter private land while developing the corridor.

- 2.7 Traffic management plans shall be prepared and implemented in accordance with *AS1742.3 Manual of Uniform Traffic Control Devices Part 3 – Traffic control Devices for Works on Roads*.

- 2.8 The person responsible must:

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- (a) prior to commencing construction activity, identify the roads which it intends to use for high mass vehicles during construction activity; and
- (b) compensate road authorities to the extent of increased costs reasonably incurred by the road authorities for the repair or reinstatement of any roads and bridges which the person responsible uses for high mass vehicles during construction activities.

2.9

Buildings that include the intake pump station, and balance control tanks must be designed to the approval of the Council's Technical Services Manager and must meet the following functional statements:

- (a) buildings are to withstand the combination of loads and other actions to which it may be reasonably subjected;
- (b) glazing is to be installed in a building to avoid undue risk of injury to people;
- (c) buildings are to be constructed to maintain structural stability during fire to:
 - i) allow occupants time to evacuate safely; and
 - ii) allow for Tasmania Fire Service intervention; and
 - iii) avoid damage to other property;
- (d) buildings are to be provided with safeguards to prevent fire spread:
 - i) so that occupants have time to evacuate safely without being overcome by the effects of fire; and
 - ii) to allow for Tasmania Fire Service intervention; and
 - iii) to adjoining fire compartments; and
 - iv) between buildings;
- (e) buildings are to provide, as far as is reasonable:
 - i) safe; and
 - ii) equitable and dignified, access for people to the services and facilities within;
- (f) buildings are to be provided with fire-fighting equipment to safeguard against fire spread:
 - i) to allow occupants time to evacuate safely without being overcome by the effects of fire; and
 - ii) so that occupants may undertake initial attack on a fire; and
 - iii) so that the Tasmania Fire Service have the necessary equipment to undertake search, rescue, and fire-fighting operations; and
 - iv) to other parts of the building; and
 - v) between buildings;
- (g) buildings including any associated sitework are to be constructed in a way that protects people and other property from the adverse effects of redirected surface water;
- (h) buildings are to be constructed to provide resistance to moisture penetrating from the outside including rising from the ground;
- (i) buildings are to be constructed to avoid the likelihood of:

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- i) the creation of unhealthy or dangerous conditions; and
 - ii) damage to building elements, caused by dampness or water overflow from bathrooms, laundries and the like;
 - (j) buildings are to be constructed to provide height in a room or space suitable for the intended use;
 - (k) a space within a building used by occupants is to be provided with openings to admit natural light consistent with its function or use;
 - (l) a space within a building used by occupants is to be provided with artificial lighting consistent with its function or use which, when activated in the absence of suitable natural light, will enable safe movement;
 - (m) a space used by occupants within a building is to be provided with adequate ventilation consistent with its function or use;
 - (n) pressure vessels located in a building are to be installed in a manner which will provide adequate safety for occupants;
 - (o) equipment and safety installations in a building are to safeguard people from illness or injury and prevent the loss of amenity; and
 - (p) a building's services are to be continually capable of using energy efficiently.
- 2.10 The intake pump station and ancillary infrastructure that includes balance control tanks at Lake Trevallyn shall be constructed with appropriate landscaping treatment to mitigate any adverse visual impacts to surrounding areas, to the satisfaction of the Council's Municipal Planner.
- 2.11 Any mud or debris deposited on existing roads must be cleaned up immediately in a manner that does not impact on Council infrastructure. This may include sweeping or vacuuming.
- 2.12 A separate permit is required for future decommissioning of the pipeline.
- 2.13 A landscape assessment and site rehabilitation/reinstatement plan is to be prepared where the CEMP does not apply and is to include the following:
- (a) location of the existing or approved dwellings, buildings or structures, services and roads;
 - (b) details of proposed rehabilitation/reinstatement to be undertaken for all disturbed surfaces;
 - (c) flora species used for rehabilitation;
 - (d) surface treatment and materials used for reinstatement of hard infrastructure;
 - (e) street trees where removed must be replaced with a suitable advanced tree with a minimum unbranched trunk height of 2 metres to the satisfaction of the Council's Municipal Planner.

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- 2.14 The person responsible must limit construction vehicle speed to 40km/h along roads within the construction corridor, where adjacent to residential areas.
- 2.15 Prior to the commencement of construction activities, the person responsible must:
- (a) facilitate regular contact with affected landowners or occupiers; and
 - (b) take reasonable endeavours to notify landowners and occupiers of schedules of activity in the vicinity of their land, including any general equipment movement schedules.
- 2.16 Excess excavated material that is removed from the construction corridor must only be deposited at sites approved by the Council for land filling.
- 2.17 No contaminated drainage, silt or sediment as a result of works shall be discharged into the Council's piped stormwater drainage system.
- 2.18 Prior to the commencement of use of the pipeline, a report must be submitted to all relevant jurisdictional bodies that outlines a risk assessment and management plan for the operational phase of the project. The report must specifically detail how the proposed risk assessment and management process will ensure location specific environmental and societal risks will be satisfactorily addressed in terms of pipeline failure or uptake failure at the Trevallyn pump station, for overflow of the balance tank near Reatta Road. Written certification shall be provided to the Council from the author of the detailed report stating the purpose, for which the report was provided, the context in which it was commissioned, and any limitations, qualifications, or reservations by the Certifier. It shall state that the Certifier is aware that Council and other relevant authorities will be relying on this certification in its assessment of the proposal. It shall indemnify the Council and other relevant authorities from any legal liability arising from errors or omissions in the report and pipeline/pump station design.
- 2.19 A condition assessment of all buildings within 150 metres of the construction corridor must be conducted by an accredited building surveyor prior to any blasting.

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Part 3 – Environmental Conditions

SECTION 1 – DEFINITIONS

In this part, unless the contrary intention is expressed:

Aboriginal heritage relic means:

- (a) any artefact, painting, carving, engraving, arrangement of stones, midden, or other object made or created by any of the original inhabitants of Australia or the descendants of any such inhabitants;
- (b) any object, site, or place that bears signs of the activities of any such original inhabitants or their descendants; or
- (c) the remains of the body of such an original inhabitant or of a descendant of such an inhabitant who died before the year 1876 that are not interred in –
 - (i) any land that is or has been held, set aside, reserved, or used for the purposes of a burial-ground or cemetery pursuant to any Act, deed, or other instrument; or
 - (ii) a marked grave in any other land;

subject to the following provisions:

- (a) no object made or created after the year 1876 shall be treated as a relic, and no activity taking place after that year shall for those purposes be regarded as being capable of giving rise to such a relic; and
- (b) in any proceedings in relation to an object alleged to be a relic, the court shall assume the object to be a relic if it is satisfied that there are reasonable grounds for believing that the object is, or may be, a relic;

Aboriginal heritage specialist means a person recognised by the Aboriginal Heritage Office and the Tasmanian Aboriginal Land and Sea Council for the purposes of investigating, examining and reporting on Aboriginal heritage;

APIA Code means the Australian Pipeline Industry Association Ltd. Code of Environmental Practice – Onshore Pipelines (2005), or any revised version thereof;

Australian Standard or **AS** means an Australian Standard published by Standards Australia International Ltd. Any reference to an Australian Standard is a reference to the most recent edition of that Standard, unless otherwise stated;

CEMP means an Environmental Management Plan prepared for the construction phase of the activity;

Common Wombat means *Vombatus ursinus tasmaniensis*

construction activities means activities on or in the terrestrial or marine environment associated with the construction phase of the activity, including but not limited to, activities associated with the clearance of vegetation, site works to create a level site, blasting, pile driving, backhoe dredging, rock breaking, rock crushing, road

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construction, associated infrastructure installation, installation of fences, plant and building construction and installation;

dangerous goods has the meaning given to that expression in the *Dangerous Goods Act 1998*;

decommissioning means the dismantling and removal of structures and equipment and the removal or control of pollutants or processes that may cause environmental harm undertaken subsequent to the termination or abandonment of any activity;

Director means the Director of Environmental Management holding office under section 18 of the EMPCA and includes a person authorised in writing by the Director to exercise the relevant power or function on the Directors behalf;

Director of Inland Fisheries means the Director of Inland Fisheries holding office under section 11 of the *Inland Fisheries Act 1995*;

Director of National Parks and Wildlife means the Director of National Parks and Wildlife holding office under section 6 of the *National Parks and Reserves Management Act 2002*;

disturbance means a change from the pre-construction condition of vegetation, soil, water or ecosystems arising from the activity;

DPIW means the Department of Primary Industries and Water, and includes any other Department to which the administration of all or part of the TSPA may be assigned;

DTAE means the Department of Tourism, Arts and the Environment, and includes any other Department to which the administration of all or part of the EMPCA may be assigned;

emergency event means an unplanned event requiring an urgent response to protect life, the environment or property;

EMPCA means the *Environmental Management and Pollution Control Act 1994*;

EPBC Act means the *Commonwealth Environment Protection and Biodiversity Conservation Act 1999*;

erosion control structures means structures designed and constructed to reduce erosion and includes, without limitation, erosion control berms and sediment settling ponds;

exclusion zone means an area into which unauthorised entry is prohibited;

GDA94 means Geocentric Datum of Australia 1994;

historic cultural heritage place has the meaning given to ‘place’ in the *Historic Cultural Heritage Act 1995*;

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hydrotest activities means hydrostatic pressure testing associated with pipeline commissioning;

incident means the unplanned release of a pollutant as a result of the activity, including as a result of an emergency, accident or malfunction, being a release which causes or may cause material environmental harm;

laydown area means an area required for the storage and assembly of plant, equipment and materials required for construction purposes;

Masked Owl –Tasmanian means *Tyto novaehollandiae castanops*;

NATA means National Association of Testing Authorities, Australia;

native vegetation means plant species that occur naturally in a given area;

Natural Values Atlas means the *Natural Values Atlas* maintained and published on the internet by DPIW;

NCA means the *Nature Conservation Act 2002*;

noise sensitive premises means:

- (a) domestic premises;
- (b) caravan parks and camping grounds;
- (c) urban parks, urban reserves, public gardens and urban outdoor recreational areas (other than spectator sporting venues);
- (d) hospitals;
- (e) sanatoria, rehabilitation centres, and the like;
- (f) premises used for child care;
- (g) premises used for aged care;
- (h) educational institutions - schools, colleges, universities, technical and further education institutes, academies, lecture halls, and other premises used for the purpose of instruction;
- (i) premises used for public religious worship;
- (j) hotels, clubs, lodges, and the like which provide accommodation to the public;
- (k) prisons and detention centres; or
- (l) libraries.

nutrients means nitrogen and phosphorus;

OEMP means an Environmental Management Plan prepared for the operational phase of the activity;

onshore means on land above low water mark;

Peregrine Falcon means *Falco peregrinus macropus*;

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planning authority means the Council(s) for the municipal area(s) in which the activity is situated;

publicly available means the document, excluding any commercial-in-confidence material, is available for review and download from a publicly accessible website, and that the document, excluding any commercial-in-confidence material, will be made available to a member of the public in printed or electronic format upon request;

PWS means the Parks and Wildlife Service Division of DTAE;

rehabilitation means activities associated with restoring sites cleared or disturbed during construction or operation of the activity to state as close as reasonably practicable to their pre-construction condition and includes both post-construction rehabilitation around operating areas and rehabilitation undertaken as part of decommissioning;

reuse means use of materials that would otherwise be disposed of as wastes without significant reprocessing or conversion of those materials;

revegetation means activities undertaken to re-establish desirable vegetation on areas impacted by construction, operation or decommissioning activities and includes, without limitation, preparing the soil and planting seeds, seedlings, cuttings or other viable propagules and includes maintenance activities undertaken to ensure successful re-colonisation by desirable vegetative species;

Secretary means the Secretary of DPIW;

Spotted-tailed Quoll means *Dasyurus maculatus maculatus*;

State waters has the meaning given in Section 5 of the *Living Marine Resources Management Act 1995*;

Swift Parrot means *Lathamus discolor*;

Tasmanian Devil means *Sarcophilus harrisii*;

Tasmanian Noise Measurement Procedures Manual means the *Noise Measurement Procedures Manual* published by the Environment Division of the then Department of Primary Industries, Water and Environment in July 2004 and any subsequent updates thereof;

threatened fauna species means fauna species listed under the EPBC Act, the NCA, the TSPA or the schedules to the *Wildlife Regulations 1999*;

threatened flora species means flora species listed under the EPBC Act, the NCA, the TSPA or the schedules to the *Wildlife Regulations 1999*;

TSPA means *Threatened Species Protection Act 1995*;

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trench plug means material introduced into an open pipeline trench to allow animals to cross from one side of the trench to the other and to allow egress of animals which fall into the trench;

utility services means all water and gas mains, electrical transmission lines and communication cables that are not owned or operated by the person responsible;

watercourse means a river, creek or other natural stream of water flowing in a defined channel, or between banks, notwithstanding that the flow may be intermittent or seasonal or the banks not clearly or sharply defined, but does not include a drain or drainage depression in the contours of the land which only serves to relieve upper land of excess water in times of major precipitation;

Wedge-tailed Eagle means *Aquila audax fleayi*;

wetland means land which is covered by water or subject to saturated soils for part of the year under normal climatic and drainage conditions;

White-bellied Sea-eagle means *Haliaeetus leucogaster*.

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SECTION 2 – CONDITIONS

General

- GN 1.1 A copy of these conditions and any associated documents referred to in these conditions must always be held in a location that is known and accessible to the person responsible for the activity. The person responsible for the activity must take all reasonable steps to ensure that all persons who are responsible for undertaking work on the site, including contractors and sub-contractors, are familiar with these conditions to the extent relevant to their work.
- GN 2.1 The following changes, if they may cause or increase the emission of a pollutant that is not authorised by these conditions or otherwise result in material environmental harm, must only take place in relation to the activity if a new permit has been issued by the relevant planning authority (where the authority determines that a permit is required) or, if no such permit is required, the prior written approval of the Director:
- (a) a change to a process used in the course of carrying out the activity; or
 - (b) the construction, installation, alteration or removal of any structure or equipment used in the course of carrying out the activity; or
 - (c) a change in the nature of materials used in the course of carrying out the activity.
- GN 3.1 If the person who is or was responsible for the activity will cease or ceases to be responsible for the activity, then, as soon as practicable, but no later than 30 days after that cessation, that person must:
- (a) notify the Director in writing of that fact;
 - (b) provide the Director with full particulars in writing of any person succeeding him or her as the person responsible; and
 - (c) notify any such person of the requirements of any relevant permit, environment protection notice or other environmental management obligations.

Response to incidents

- GN 4.1 If an incident causing or threatening environmental nuisance, serious environmental harm or material environmental harm from pollution occurs in the course of the activity, then the person responsible for the activity must immediately take all practicable actions to minimise any adverse environmental effects from the incident.

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Compliance with DIIS

- GN 5.1 The activity must be undertaken in accordance with the DIIS and further information, unless otherwise specified in these conditions or unless otherwise approved in writing by the Director.

Commitments

- GN 6.1 The activity must be carried out in accordance with the commitments contained in the DIIS and further information unless otherwise specified in these conditions or unless otherwise approved in writing by the Director.

Response to public complaints

- GN 7.1 Prior to the commencement of construction activities, or by a date specified in writing by the Director, a Public Complaint Response Protocol must be submitted to the Director for approval. The protocol must include, but is not limited to, the following:

- (a) the establishment of a 24 hour public complaints telephone hotline;
- (b) a public communications process in relation to the hotline;
- (c) a procedure for responding to public complaints received which includes investigation, mitigation (if necessary), feedback and documentation steps; and
- (d) the establishment of a public complaints register.

- GN 8.1 A public complaints register must be maintained and made available for inspection by an authorized officer upon request. The public complaints register must, as a minimum, record the following detail in relation to each complaint received in which it is alleged that environmental harm (including an environmental nuisance) has been caused by the activity:

- (a) the time at which the complaint was received;
- (b) contact details for the complainant;
- (c) the subject matter of the complaint;
- (d) any investigations undertaken with regard to the complaint; and
- (e) the manner in which the complaint was resolved, including any mitigation measures implemented.

- 8.2 Complaint records must be maintained for a period of at least 3 years.

APIA Code

- GN 9.1 The activity must be undertaken in accordance with the following provisions of the APIA Code:

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- (a) the management measures specified in Section 4 (Environmental Guidelines – Construction);
- (b) the environmental management measures specified in Section 5 (Environmental Guidelines – Operations); and
- (c) the management measures specified in Section 7 (Environmental Guidelines – Decommissioning).

9.2 The person responsible for the activity must comply with any requirement specified by an authorized officer for the purpose of securing compliance with any of these provisions of the APIA Code.

Construction

Construction timetable

- CN 1.1 Prior to the commencement of construction activities, or by a date specified in writing by the Director, a construction timetable must be submitted to the Director. The timetable must identify the key construction activities and dates for commencement and completion of each key construction activity. The Director must be notified in advance of any significant changes to the construction timetable.
- 1.2 The person responsible must notify the Director in writing of the following:
- (a) the date of commencement of construction activities, within 24 hours of the commencement;
 - (b) the date of commencement of key construction activities identified in the construction timetable, within 24 hours of their commencement;
 - (c) the date of commencement of commissioning activities, within 24 hours of the commencement; and
 - (d) the date of completion of commissioning activities, within 24 hours of completion.

Construction Environmental Management Plan

- CN 2.1 Prior to the commencement of construction activities, or by a date specified in writing by the Director, a detailed timetable for the preparation of an Environmental Management Plan for the construction phase of the activity (CEMP) must be prepared and submitted to the Director for approval. The timetable may include the progressive submission of sections of the CEMP.
- 2.2 The CEMP must be prepared and submitted in accordance with the approved timetable and any written requirements of the Director, unless otherwise approved in writing by the Director. The objective of the CEMP is to describe the measures and processes by which

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compliance with the requirements of the conditions contained in this schedule relating to the construction phase of the activity will be achieved.

- 2.3 The CEMP must be prepared in accordance with any guidelines provided by the Director, and must be prepared in consultation with relevant Government agencies.
- 2.4 The CEMP must place particular emphasis on the following:
- (a) acid sulphate soils management;
 - (b) erosion and sediment control management;
 - (c) marine pest management;
 - (d) weed and disease management;
 - (e) *Phytophthora cinnamomi* management;
 - (f) vegetation and fauna management;
 - (g) rehabilitation of disturbed areas;
 - (h) fire management;
 - (i) blasting management;
 - (j) noise emissions management;
 - (k) chemical and hydrocarbon spill management;
 - (l) Aboriginal heritage management;
 - (m) historic heritage management;
 - (n) air emissions (including dust) management; and
 - (o) surface water quality management.
- 2.5 The submitted CEMP (or sections of the CEMP if submitted in stages) must be accompanied by an independent audit report prepared by an appropriately qualified external auditor. The auditor must be approved in writing by the Director prior to undertaking the audit. The audit report must assess the measures and processes contained in the CEMP (or sections of the CEMP if submitted in stages) and must include, but is not limited to, the auditor's findings, recommendations and conclusion as to whether or not the CEMP satisfies the objective for the CEMP specified above.
- 2.6 Construction activities must not take place unless the CEMP and audit report have been submitted to the Director. Where the approved timetable includes the progressive submission of sections of the CEMP, some construction activities may take place provided that the sections of the CEMP and audit report relevant to those activities have been submitted, and provided the Director has given written authority for those construction activities to take place.
- 2.7 The activity must be undertaken in accordance with the CEMP, as amended from time to time.
- 2.8 If requested to do so by the Director, the person responsible must revise the CEMP and submit the revised CEMP to the Director, doing so by such a date as may be specified in the Director's request.

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- 2.9 The person responsible must prepare a publicly available document which summarises the CEMP structure and content.

Construction Monitoring Plan

- CN 3.1 Prior to the commencement of construction activities, or by a date specified in writing by the Director, a Construction Monitoring Plan must be submitted to the Director for approval.
- 3.2 The plan must be prepared in accordance with any guidelines provided by the Director, and must be prepared in consultation with relevant Government agencies.
- 3.3 The plan must be consistent with the requirements of these conditions and include the following programs:
- (a) an Air Monitoring Program;
 - (b) a Noise Monitoring Program;
 - (c) a Surface Water Monitoring Program;
 - (d) a Marine Water Quality Monitoring Program;
 - (e) a Marine Sediment Monitoring Program; and
 - (f) a Marine Ecological Monitoring Program, which must be consistent with, but not limited to, the monitoring design described in Section 2 (Tamar River Crossing) of the Aquenal Pty Ltd report to Gunns Limited titled *Ecological Monitoring Program for Marine and Estuarine Habitats during the construction and operation phases of Gunns Limited's proposed pulp mill*, 21st December 2006.
- 3.4 The plan must include, but is not limited to, details of the following:
- (a) a table containing all of the major commitments made in the plan;
 - (b) an implementation timetable for key aspects of the plan; and
 - (c) a reporting program to regularly advise the Director of the results of the plan.
- 3.5 Construction activities must not commence unless the plan has been approved in writing by the Director. Notwithstanding the above, some construction activities may take place prior to the approval of the plan provided that the sections of the plan relevant to those activities are considered satisfactory by the Director, and provided that the Director has given written authority for those construction activities to take place.
- 3.6 The approved plan, as amended from time to time with the approval of the Director, must be implemented to the satisfaction of the Director.
- 3.7 The plan must be made publicly available.

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Construction corridor

- CN 4.1 Construction activities, except for the construction of vehicle access tracks to the construction corridor, must only occur within the construction corridor unless otherwise specified in these conditions or unless otherwise approved in writing by the Director.
- 4.2 Notwithstanding the above, construction activities in relation to the Tamar River crossing must only occur within the eastern (up-river) construction corridor option, unless otherwise approved in writing by the Director.
- 4.3 Notwithstanding the above, construction activities in relation to the Lake Trevallyn pump station and water inlet infrastructures must only be undertaken in the area generally indicated on Figure 2 of Appendix 44 of the DIIS for such activities, unless otherwise approved in writing by the Director.
- CN 5.1 The width of the construction corridor must not exceed 20 metres, unless otherwise approved in writing by the Director.
- CN 6.1 Construction activities for a particular section of the construction corridor, from initial site disturbance to the commencement of revegetation, must be completed within 6 weeks, unless otherwise approved in writing by the Director.
- CN 7.1 The person responsible must notify the Director of any proposed change of location of the construction corridor of greater than 10 metres prior to commencing construction activities in relation to the proposed change. The notification must include the following:
- (a) details of the proposed change of location of the construction corridor, including a plan showing the change;
 - (b) the reason for the proposed change;
 - (c) details of any additional environmental (including heritage) surveys undertaken or proposed to be undertaken in relation to the proposed change of location;
 - (d) details of any environmental impact which is expected to or which may arise from the proposed change of location; and
 - (e) details of any proposed management measures to avoid or mitigate these impacts.
- 7.2 Any such proposed change of location of the construction corridor which has the potential to result in an increase in adverse environmental impacts, or which may otherwise result in material environmental harm, must be approved in writing by the Director prior to the commencement of construction activities in relation to the proposed change of location.
- 7.3 The management measures contained in the notification of proposed change of location of the construction corridor, and any other

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requirements specified in writing by the Director, must be implemented to the satisfaction of the Director.

- CN 8.1 Where the person responsible proposes to change the location of the construction corridor such that one or more of the following applies:
- (a) native vegetation is likely to be disturbed;
 - (b) there are known threatened flora or fauna species locations on or within 50 metres of the proposed changed location;
 - (c) there are known acid sulphate soils on or within 50 metres of the proposed changed location; or
 - (d) there are known Aboriginal heritage relics and/or historic cultural heritage places on or within 50 metres of the proposed changed location;

the Director must be notified in writing of the proposed change of location prior to the commencement of construction activities in relation to the proposed change.

- 8.2 The notification must include the following:
- (a) details of the proposed change of location of the construction corridor, including a plan showing the change;
 - (b) the reason for the proposed change;
 - (c) details of any additional surveys undertaken or proposed to be undertaken in relation to the proposed change of location;
 - (d) details of any environmental impact which is expected to or which may arise from the proposed change of location; and
 - (e) details of any proposed management measures to avoid or mitigate these impacts.
- 8.3 Construction activities in relation to the proposed change of location of the construction corridor must not take place unless the proposed change of location has been approved in writing by the Director.
- 8.4 The management measures contained in the approved notification of proposed change of location of the construction corridor, and any other requirements specified in writing by the Director, must be implemented to the satisfaction of the Director.

Monitoring

- MN 1.1 Any sample or measurement required to be obtained by the conditions of this permit must be subject to the following:
- (a) the sample must be tested in a laboratory accredited by the National Association of Testing Authorities (NATA), or a laboratory approved in writing by the Director, for the specified test;
 - (b) the measurement must be made, or the sample must be collected and analysed in accordance with the relevant Australian

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Standards, NATA approved methods, the *American Public Health Association Standard Methods for the Analysis of Water and Waste Water*, *Noise Measurement Procedures Manual* or other standard(s) approved by the Director;

- (c) details relating to the collection and analysis of the sample must be retained for at least three years after the date of measurement and be made available on request by an authorized officer;
- (d) the sample must be taken and transported by a person with appropriate training and experience.

- MN 2.1 All results of any ecological monitoring in State waters undertaken in accordance with these conditions must be made available to the Director within 90 days of the monitoring being completed.
- MN 3.1 Marine fauna or flora collected as part of any monitoring programs associated with State waters must be identified to the lowest possible taxonomic level, which as a minimum must be at least down to family level or in the case of introduced species and molluscs down to species level.
- MN 4.1 All marine fauna and flora collected must be appropriately preserved and placed in storage jars that must be labelled (inside and outside) with details of date of collection, site location, collection method and collector's and identifier's name. These jars must be stored for at least 5 years in a safe place so that confirmation of species identification can be investigated at a later date, if required.

Operations

Operations Environmental Management Plan

- OP 1.1 At least 60 days prior to the completion of commissioning activities, or by a date specified in writing by the Director, an Environmental Management Plan for the operational phase of the activity (OEMP) must be prepared and submitted to the Director.
- 1.2 The OEMP must be prepared in accordance with any guidelines provided by the Director. The objective of the OEMP is to describe the measures and processes by which compliance with the requirements of these conditions relating to the operational phase of the activity will be achieved.
- 1.3 The submitted OEMP must be accompanied by an independent audit report prepared by an appropriately qualified external auditor. The auditor must be approved in writing by the Director prior to undertaking the audit. The audit report must assess the measures and processes contained in the OEMP and must include, but is not limited to, the auditor's findings, recommendations and conclusion as to

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whether or not the OEMP satisfies the objective for the plan specified above.

- 1.4 Operational activities must not take place unless the plan and audit report have been submitted to the Director.
- 1.5 The activity must be undertaken in accordance with the OEMP, as amended from time to time.
- 1.6 If requested to do so by the Director, the person responsible must revise the OEMP and submit the revised OEMP to the Director, doing so by such a date as may be specified in the Director's request.
- 1.7 The person responsible must prepare a publicly available document which summarises the OEMP structure and content.

Maintenance

- MT 1.1 The person responsible for the activity must notify the Director of any proposed maintenance activity (excluding activities associated with the initial response to an emergency event) which has the potential to breach these conditions or result in material environmental harm, unless the Director has specified in writing that the activity does not require notification. The notification must be received by the Director prior to commencing the proposed maintenance activity, and where practicable, must be received at least 72 hours prior to commencing the proposed maintenance activity. The notification must include the following:
- (a) details of the proposed maintenance activity;
 - (b) the reason for the proposed maintenance activity;
 - (c) details of any additional environmental surveys undertaken or proposed to be undertaken in relation to the proposed maintenance activity;
 - (d) details of all reasonably foreseeable environmental impacts associated with the proposed maintenance activity; and
 - (e) details of any proposed management measures to avoid or mitigate environmental impacts.
- MT 2.1 Maintenance activities which have the potential to breach these conditions or result in material environmental harm must not commence without the prior written approval of the Director.
- MT 3.1 If requested to do so by the Director, the person responsible for a maintenance activity must submit an Environmental Management Plan with respect to that particular maintenance activity to the Director for approval. The plan must be prepared in accordance with any requirements and by such date as the Director may specify in writing.

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- MT 4.1 The maintenance activity must be undertaken in accordance with any Environmental Management Plan prepared with respect to that maintenance activity, and any amendment to the plan, approved in writing by the Director.

Utility services

- UT 1.1 Prior to the commencement of construction activities in the vicinity of utility services, the person responsible must use best endeavours to obtain the consent of the relevant service provider for each crossing of, or installation in close proximity to, an existing utility service.
- 1.2 In undertaking the construction activities in the vicinity of utility services, the person responsible must comply with all reasonable technical and other requirements of the service provider in respect of the proposed activities to ensure that the existing utility service is protected from physical damage, corrosion, electrolysis, field induction or other potential damage.

Acid sulphate soil management

- AS 1.1 Prior to the commencement of construction activities in a particular area, or by a date specified in writing by the Director, a report must be submitted to the Director for approval which contains the following:
- (a) methodology and results of a comprehensive assessment of the construction corridor to identify areas at risk of acid sulphate soil. The survey methodology (including survey timing) must be developed to the satisfaction of the Director; and
 - (b) the areas at risk must be identified using the sampling protocol detailed in Section 4 of *Guidelines for Sampling and Analysis of Lowland Acid Sulfate Soils (ASS) in Queensland*, Ahern *et al.*, 1998, Queensland Department of Natural Resources' Queensland Acid Sulfate Soils Investigation Team (QASSIT) (This document is available on the internet at: www.nrw.qld.gov.au/land/ass/products.html).
- 1.2 If areas at risk of impacts from acid sulphate soils are identified during the acid sulphate soils assessment, then the CEMP must include details of proposed measures and procedures for the management of acid sulphate soils and potential acid sulphate soils. The CEMP must specifically include, but is not limited to, details of the following:
- (a) the use of best practice environmental management techniques for the management of potential acid sulphate soils and acid sulphate soils;
 - (b) measures to address risks and mitigation measures associated with:
 - i) exposure of potential acid sulphate soils (including excavation);

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- ii) stockpiling of acid sulphate soils;
 - iii) acid drainage; and
 - iv) impacts on infrastructure and the biophysical environment;
- (c) details of temporary and permanent control measures for excavation, stockpiling and backfilling acid sulphate soils in accordance with the document *Queensland Acid Sulfate Soil Technical Manual: Soil Management Guidelines*, Dear *et al.* 2002; Queensland Department of Natural Resources Queensland Acid Sulfate Soils Investigation Team (QASSIT) (This document is available on the internet at www.nrw.qld.gov.au/land/ass/products.html); and
- (d) a monitoring and maintenance program.

Erosion and sediment control

- ER 1.1 The CEMP must include details of proposed measures and procedures for the management of erosion and sediment movement. The CEMP must specifically include, but is not limited to, details of the following:
- (a) identification of areas at risk of erosion and sediment movement;
 - (b) measures to manage:
 - i) water and wind erosion;
 - ii) turbidity in the freshwater, estuarine and marine environments;
 - iii) sodic soils;
 - iv) landslip and slumping;
 - v) soil mixing, inversion and compaction; and
 - vi) streambank erosion and channel stability;
 - (c) measures to prevent sediment runoff into watercourses and wetlands from ground disturbance;
 - (d) temporary and permanent control measures for disturbed areas and stockpiles; and
 - (e) a monitoring and maintenance program.
- ER 2.1 Erosion control berms must be installed and maintained along the construction corridor to ensure runoff water does not lead to erosion or sediment movement. The berms must be designed, constructed and maintained in accordance with the management measures specified in Section 4.13 of the APIA Code and must be to the satisfaction of the Director.
- ER 3.1 Erosion control structures must be regularly inspected and maintained to ensure that they are performing effectively, particularly after high intensity rainfall or run-off events. The inspection and maintenance must be carried out to the satisfaction of the Director.
- ER 4.1 Existing access tracks must be utilised wherever practicable to access the construction corridor. Reasonable steps must be taken to ensure

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that vehicles remain on designated access roads and tracks and within the construction corridor.

Surface water

- SW 1.1 Construction methods used for watercourse crossings must be consistent with Section 4.12 of the APIA Code, unless otherwise approved in writing by the Director.
- SW 2.1 On moderate to steep slopes which lead down to watercourses, the period between clearing of vegetation within the construction corridor and the commencement of construction activities on the watercourse crossing must be kept to the minimum practicable.
- SW 3.1 On moderate to steep slopes which lead down to watercourses, the period between trenching of the slope and the commencement of construction activities in the watercourse crossing must be kept to the minimum practicable.
- SW 4.1 Sediment movement from the construction corridor to a watercourse, wetland or State waters must be prevented. Sediment control measures such as erosion control berms and sediment pits must be installed immediately following clearing and grading activities on and at the base of any slope in the construction corridor which leads down to a watercourse, and the installation must be to the satisfaction of the Director.
- SW 5.1 Cleared vegetation must be stockpiled away from watercourses and must not be stored or, where practicable, felled so as to land in watercourses.
- SW 6.1 Soil must be stockpiled at an appropriate distance from watercourses or behind adequate berms to the satisfaction of the Director.
- SW 7.1 Once installed, watercourse crossings must not preclude up- or down-stream migration of aquatic life.
- SW 8.1 Refuelling of equipment must not occur within 50 metres of a watercourse.

Surface water monitoring

- SW 9.1 In situ meter monitoring of pH, turbidity, conductivity and dissolved oxygen must be undertaken daily in one location directly up-current and one location directly down-current of construction activities during periods where construction disturbance is occurring within a permanent watercourse.

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Hydrotest Water Management Plan

- HT 1.1 At least 30 days prior to the intended commencement of pipeline hydrotest activities, or by a date specified in writing by the Director, a Hydrotest Water Management Plan must be submitted to the Director for approval. The plan must be consistent with the management measures specified in Section 4.7.1 of the APIA Code, unless otherwise approved in writing by the Director. The plan must be site-specific and must include, but is not limited to, details of the following:
- (a) volume and source of hydrotest water;
 - (b) additives to be used and their potential environmental effects;
 - (c) measures for maximising reuse of hydrotest water for multiple test pipeline sections;
 - (d) contaminants that are likely to be present in the hydrotest water requiring disposal (eg iron/rust, sand etc) and their likely concentrations;
 - (e) pre-disposal treatment methods;
 - (f) a map showing the location and extent of any extra workspace required at hydrotest locations along with the justification for the extent of the extra workspace area;
 - (g) proposed monitoring program prior to reuse and/or prior to and after disposal of hydrotest water;
 - (h) any proposed holding dams;
 - (i) proposed method and location of reuse and/or disposal of hydrotest water;
 - (j) proposed management measures to avoid or minimise environmental impacts associated with hydrotesting, including sourcing, storage, treatment, reuse and/or disposal of hydrotest water; and
 - (k) an implementation timetable for key aspects of the plan.
- 1.2 Hydrotest activities must not take place unless the Hydrotest Water Management Plan has been approved in writing by the Director.
- 1.3 The approved plan, as amended from time to time with the approval of the Director, must be implemented to the satisfaction of the Director.
- 1.4 The plan must be made publicly available.

Tamar River crossing

- TM 1.1 The CEMP must include details of proposed measures and procedures for the management of marine pests during construction activities relating to the Tamar River crossing.
- 1.2 The CEMP must, as a minimum, be consistent with the current International Ballast Water Management Arrangements implemented under the *Quarantine Act 1908* (Commonwealth). The CEMP must

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also contain appropriate measures to manage domestic ballast water and biofouling arrangements for all vessels associated with construction activities consistent with the *Draft Domestic Ballast Water Management Arrangements and the National Best Management Practice Guidelines for Commercial Non-Trading Vessels* (with respect to managing translocation of marine pests), that are currently being finalised by the National Introduced Marine Pest Coordination Group.

- 1.3 The CEMP must include, but is not limited to, details of the following:
- (a) the number and type of sea going vessels that will be involved in the construction activities and their history of movement for the last twelve months;
 - (b) the manner in which all construction sea going vessels, plant, equipment and materials will be managed and treated to minimise the potential for translocating introduced marine pests prior to arrival at, and/or departure from, each construction site; and
 - (c) the manner in which any international or domestic sea going vessels will be managed with regard to the translocation of marine pests.

Tamar Crossing Management Plan

TM 2.1 Prior to the commencement of pipeline construction activities in State waters in the Tamar River, or by a date specified in writing by the Director, a Tamar River Crossing Management Plan must be submitted to the Director for approval.

- 2.2 The plan must include, but is not limited to, details of the following:
- (a) the methodology and results of a sediment survey of the riverbed where the pipeline is to be installed, to be carried out in accordance with a sediment survey design approved by the Director, which must include analysis of particle size distribution, redox status, metals and nutrients;
 - (b) the methodology and results of a program to characterise potential impacts of sediment disturbance, including elutriate testing of sediment cores;
 - (c) proposed measures relating to siting, design and/or management measures to minimise adverse impacts due to disturbance of sediments;
 - (d) the proposed construction methodology;
 - (e) a map showing the location and extent of proposed laydown areas and the pipeline location;
 - (f) a monitoring program;
 - (g) justification for the extent of the laydown area;
 - (h) proposed management measures to avoid or minimise environmental impacts resulting from construction activities;

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- (i) proposed rehabilitation measures, including measures to stabilise disturbed riverbanks;
 - (j) management measures to avoid translocation of Gambusia (*Gambusia holbrooki*) or Rice Grass (*Spartina anglica*) as a result of the activity;
 - (k) a table containing all of the major commitments made in the plan;
 - (l) an implementation timetable for key aspects of the plan; and
 - (m) a reporting program to regularly advise the Director of the progress of implementing the plan.
- 2.3 Construction activities must not commence unless the plan has been approved in writing by the Director. Notwithstanding the above, some construction activities may take place prior to the approval of the plan provided that the sections of the plan relevant to those activities are considered satisfactory by the Director, and provided that the Director has given written authority for those construction activities to take place.
- 2.4 The approved plan, as amended from time to time with the approval of the Director, must be implemented to the satisfaction of the Director.
- 2.5 The plan must be made publicly available.

Tamar River crossing monitoring

- TM 3.1 Prior to the commencement of construction activities, three equally spaced sediment cores must be taken from within the sub tidal part of the construction corridor at the Tamar River crossing, to a depth of 4-5 metres.
- 3.2 Each sediment core must be visually assessed and representative sediment samples taken from within each sediment type for analysis. At a minimum, three representative samples must be taken representing surface, mid-depth and deep sediments.
- 3.3 Samples must be analysed for the parameters and analyses specified in Column 1 of Annex M1 to these conditions, and any other parameters or analyses specified in writing by the Director.
- TM 4.1 In situ profile monitoring of flow, pH, turbidity, temperature and dissolved oxygen must be undertaken daily in one location directly up-current and one location directly down-current of the construction site during periods where construction activities are occurring below the high water mark.
- TM 5.1 Where a substantial suspended solids plume is generated by the construction activity, water samples must be collected from within the turbid plume, and as near as is practicable to the source of the plume.

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- 5.2 Where substantial turbid plumes are being generated on a daily basis, water samples must be collected from within the turbid plume as a minimum every second day.
- 5.3 Samples must be analysed for the parameters and analyses specified in Column 2 of Annex M1 to these conditions, and any other parameters or analyses specified in writing by the Director.
- TM 6.1 Following the completion of installation of the water supply pipeline across the Tamar River, the foreshore must be reinstated as near as is practicable to its pre-existing profile.
- TM 7.1 Within 90 days of the completion of construction activities associated with the Tamar River crossing, or by a date specified in writing by the Director, a report must be submitted to the Director which contains the results of all monitoring associated with the Tamar River crossing, and an assessment of the effectiveness of rehabilitation measures.

Fauna Management Plan

- FN 1.1 Prior to the commencement of construction activities, or by a date specified in writing by the Director, a Fauna Management Plan must be submitted to the Director for approval, which contains details of the following:
- (a) the methodology and results of a detailed survey to determine the presence of active Tasmanian Devil, Common Wombat and Spotted-tailed Quoll den sites within the construction corridor. The survey methodology (including survey timing) must be developed to the satisfaction of the Director;
 - (b) any proposed siting, design and/or management measures to minimise adverse impacts on Tasmanian Devils, Common Wombats or Spotted-tailed Quolls;
 - (c) the methodology and results of a detailed survey to determine the presence of active Wedge-tailed Eagle, White-bellied Sea-eagle, Masked Owl – Tasmanian, Swift Parrot and Peregrine Falcon nest sites within the construction corridor. The survey methodology (including survey timing) must be developed to the satisfaction of the Director; and
 - (d) any proposed siting, design and/or management measures to minimise adverse impacts on any active Wedge-tailed Eagle, White-bellied Sea-eagle, Masked Owl – Tasmanian, Swift Parrot or Peregrine Falcon nest sites.
- 1.2 Construction activities must not take place unless the plan has been approved in writing by the Director. Notwithstanding the above, some construction activities may take place prior to the approval of the plan provided that the sections of the plan relevant to those activities are considered satisfactory by the Director, and provided that the Director

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has given written authority for those construction activities to take place.

- 1.3 The proposed siting, design and/or management measures contained in the approved plan, as amended from time to time with the written approval of the Director, must be implemented to the satisfaction of the Director.
- 1.4 The plan must be made publicly available.
- FN 2.1 Data from threatened fauna surveys must be provided to the Secretary in an electronic form suitable for entry into the *Natural Values Atlas* within 90 days of collection. Data must include species name, location information (including grid reference in GDA94 and location variation in metres), observer name, observation date, number of individuals and area occupied.
- FN 3.1 During the period between 1 August and 1 February construction activities, or maintenance activities which last for a continuous period of greater than 30 minutes, or maintenance activities which last for more than a total period of 60 minutes within a 24 hour period, must not occur within:
- (a) 1000 metres of an active Wedge-tailed Eagle or a White-bellied Sea-eagle nest if the construction activities or maintenance activities are in line-of-sight of the nest site; or
 - (b) 500 metres of an active Wedge-tailed Eagle or a White-bellied Sea-eagle nest site;
- unless approved in writing by the Director.
- FN 4.1 When construction activities take place at night, light shades and low lighting must be applied to construction and operational areas located adjacent to remnant native vegetation.
- FN 5.1 Permanent access tracks located in native vegetation areas must be as narrow as practicable in order to minimise the clearance of native vegetation. The construction and maintenance of permanent access tracks must avoid any impact on threatened fauna species unless otherwise approved in writing by the Director.
- FN 6.1 Effective measures must be implemented to enable the escape of animals from the open trench. Measures may include trench plugs or ramps with slopes of no greater than 50 percent located at regular intervals along the trench. The measures must be implemented to the satisfaction of the Director.
- FN 7.1 Effective measures must be implemented to prevent the ingress of animals into pipe sections, particularly at night. The measures must be implemented to the satisfaction of the Director

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- FN 8.1 All sections of open trench must be monitored daily for trapped animals by appropriately trained personnel, and trapped animals identified must be released outside the construction corridor.
- FN 9.1 Where practicable, water intake from Lake Trevallyn must include an effective screen or such device to prevent eels entering the pipe for the duration of the pipeline usage to the satisfaction of the Director of Inland Fisheries.

Vegetation management

- VG 1.1 The clearance of, and disturbance to, native vegetation must be minimised to the greatest extent practicable. Native trees, and in particular old growth or hollow bearing trees, must be retained wherever practicable within the construction corridor.
- VG 2.1 Prior to the commencement of construction activities in a particular area, exclusion zones must be established to the satisfaction of the Director around native vegetation that is to be retained in that area, both within and in the immediate vicinity of the construction corridor. Exclusion zones must be adequately fenced or marked and be clearly identifiable as an exclusion zone to the satisfaction of the Director.
- 2.2 Vegetation (including root systems) within an exclusion zone must not be damaged.
- 2.3 Soil within an exclusion zone must not be disturbed.
- VG 3.1 Except where otherwise specified in the CEMP, the removal of felled coarse woody material must be minimised.
- VG 4.1 Where removed, topsoil must be stockpiled separately from subsoil and the original soil profile must be reinstated when the trench is backfilled.
- VG 5.1 To the extent practicable, tree, shrub and groundcover material (including seeds and/or cuttings for propagation) must be collected from known populations of threatened flora species and threatened native vegetation, prior to them being disturbed or cleared, for use in subsequent rehabilitation works.
- VG 6.1 Stockpiling of soil, or other material associated with the construction activities, must not occur outside the construction corridor, unless otherwise approved in writing by the Director.
- VG 7.1 Prior to the commencement of construction activities in an area where a survey is required by this condition, or by a date specified in writing by the Director, pre-construction surveys must be undertaken by a suitably qualified person(s) for threatened flora species, non-threatened native flora species and threatened native vegetation communities.

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These surveys must occur in areas of the construction corridor that were not surveyed as part of the DIIS, or were not surveyed at the appropriate time of year, to the satisfaction of the Director.

- 7.2 A report must be submitted to the Director for approval, which contains the following:
- (a) the methodology and results of the surveys; and
 - (b) any proposed siting, design and/or management measures, including exclusion zones, to minimise adverse impacts on any identified threatened flora species, non-threatened native flora species and threatened native vegetation communities.
- 7.3 Construction activities associated with the surveyed areas must not take place unless the report has been approved in writing by the Director. Notwithstanding the above, some construction activities may take place prior to the approval of the report provided that the sections of the report relevant to those activities are considered satisfactory by the Director, and provided that the Director has given written authority for those construction activities to take place.
- 7.4 The approved report must be implemented to the satisfaction of the Director.
- VG 8.1 Threatened flora surveys required under these conditions must, where practicable, be undertaken at appropriate times of the year to identify ephemeral threatened flora species (e.g. orchids).
- VG 9.1 Data from any threatened flora surveys must be provided to the Secretary in an electronic form suitable for entry into the *Natural Values Atlas* within 90 days of collection. Data must include species name, location information (including grid reference in GDA94 and location variation in metres), observer name, observation date, number of individuals and area occupied.

Offset measures

- OF 1.1 Offset measures approved by the Secretary must be implemented to compensate for the loss of threatened flora and threatened fauna species and their habitat and threatened native vegetation communities as a result of construction activities.
- 1.2 Wherever practicable, offset areas must be located near the area of impact being offset.

Offset Plan

- OF 2.1 Within 60 days of the completion of construction activities, or by a date specified in writing by the Director, an Offset Plan must be submitted to the Director for approval.

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- 2.2 The plan must be developed in consultation with relevant Government agencies.
- 2.3 The plan must include, but is not limited to, the following:
- (a) details of all areas of native vegetation (including threatened native vegetation communities) and known threatened flora and fauna habitat impacted by the construction of the activities;
 - (b) proposed offset measures to achieve the objective of no net loss of native vegetation and ecological values due to construction activities. This may include the creation of, or the prevention, repair or mitigation of damage to, native vegetation (including threatened native vegetation communities) and the habitats of threatened fauna and threatened flora species;
 - (c) proposed measures for the ongoing management and preservation (where relevant) of the proposed offset measures;
 - (d) a table containing all of the major commitments made in the plan;
 - (e) an implementation timetable for key aspects of the plan; and
 - (f) a reporting program to regularly advise the Director of the results of implementation of the plan.
- 2.4 The approved plan must be implemented in accordance with the approved implementation timetable and must commence within six months of the completion of commissioning activities, unless otherwise approved in writing by the Director.
- 2.5 The approved plan, as amended from time to time with the approval of the Director, must be implemented to the satisfaction of the Director.
- 2.6 The plan must be made publicly available.

Weed and disease management

- WD 1.1 The CEMP must include details of proposed measures and procedures for the management of weed and disease. The CEMP must be consistent with the management measures specified in Sections 4.17 and 4.18 of the APIA Code, unless otherwise approved in writing by the Director.
- 1.2 The CEMP must be consistent with obligations in the *Weed Management Act 1999*, statutory Weed Management Plans for Tasmanian Declared Weeds, the *Northern Weed Management Strategy*, relevant Weeds of National Significance strategies and the *Tasmanian Washdown Guidelines for Weed and Disease Control (Machinery, Vehicles and Equipment, Ed. 1)*, unless otherwise approved in writing by the Director.
- 1.3 The CEMP must include, but is not limited to, details of the following:
- (a) weed and disease identification procedures;

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- (b) procedures for monitoring the impacts of outbreaks of weeds and disease on threatened flora species and threatened native vegetation communities;
- (c) procedures for monitoring the impacts of outbreaks of weeds and disease on non-threatened flora species and non-threatened native vegetation communities,
- (d) proposed weed and disease eradication or control measures;
- (e) development of weed and disease risk management plans according to risk potential;
- (f) development of temporary and permanent mitigation and control measures for weeds identified to have high risk potential;
- (g) hygiene protocols including vehicle and equipment washdown protocols;
- (h) access restrictions, where applicable; and
- (i) the areas where management measures will be implemented, including terrestrial and aquatic rehabilitation sites.

***Phytophthora cinnamomi* management**

- PC 1.1 Prior to the commencement of construction activities in a particular area, or by a date specified in writing by the Director, a report must be submitted to the Director which contains an assessment of the presence and extent of *Phytophthora cinnamomi* within areas where construction activities will occur and along any access roads/tracks and any specific management measures proposed.
- PC 2.1 In areas where *Phytophthora cinnamomi* has been identified or is reasonably likely to occur, hygiene protocols, including vehicle and equipment washdown protocols, must be undertaken in accordance with the *Interim Phytophthora cinnamomi Management Guidelines*, and *Tasmanian Washdown Guidelines for Weed and Disease Control (Machinery, Vehicles and Equipment, Ed. 1)*, unless otherwise approved in writing by the Director.
- PC 3.1 When undertaking construction activities in areas containing flora species sensitive to *Phytophthora cinnamomi*, construction and remediation materials such as gravel, soil and seedlings must be sourced from areas that can be demonstrated to be free of *Phytophthora cinnamomi*.
- PC 4.1 The CEMP must include details of proposed measures and procedures for *Phytophthora cinnamomi* management.
- 4.2 The CEMP must include, but is not limited to, details of the following:
- (a) procedures for the identification and prioritisation of areas that contain native flora species that are sensitive to *Phytophthora cinnamomi*;
 - (b) procedures for the identification of *Phytophthora cinnamomi*;

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- (c) procedures for addressing *Phytophthora cinnamomi* outbreaks, with specific consideration to those that endanger threatened flora species and threatened native vegetation communities;
- (d) procedures for minimising the area of soil disturbance and new road/track development where practicable;
- (e) procedures for sourcing construction, remediation and rehabilitation materials such as gravel, soil and seedlings from uninfected sites;
- (f) procedures for the implementation of management measures including access restrictions; and
- (g) procedures for reducing the spread of *Phytophthora cinnamomi* during fires.

Rehabilitation management

- RH 1.1 The CEMP must include details of proposed measures and procedures for the rehabilitation of disturbed areas. The CEMP must be consistent with the management measures specified in Section 4.8 of the APIA Code, unless otherwise approved in writing by the Director. The CEMP must place particular emphasis on areas where native vegetation has been disturbed and areas that show a high risk of erosion or other forms of instability.
- 1.2 The CEMP must include, but is not limited to, details of the following:
- (a) a photographic record of ecologically sensitive areas of the construction corridor prior to construction for use as a baseline to assess the success of rehabilitation following construction activities;
 - (b) proposed methods for the storage and reinstatement of soil;
 - (c) proposed stabilisation measures;
 - (d) measures for surface recontouring and soil compaction relief;
 - (e) erosion and sediment control measures for affected areas;
 - (f) procedures for replacement of habitat structural elements;
 - (g) measures for restricting vehicle access to rehabilitated areas;
 - (h) procedures and methods for rehabilitation works including replanting densities and the use of locally indigenous species appropriate to the landscape;
 - (i) procedures for the collection of seed and vegetative material for use in rehabilitation works;
 - (j) response procedures for rain and/or flooding events;
 - (k) strategies for monitoring of individual threatened flora species in rehabilitation areas if deemed necessary; and
 - (l) monitoring procedures to enable assessment of the success of maintenance and rehabilitation measures.
- RH 2.1 All areas disturbed by construction activities must be rehabilitated such that they are stable and resistant to erosion, to the satisfaction of the Director.

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- RH 3.1 Rehabilitation (including revegetation) of any disturbed area must occur as soon as practicable following the completion of pipeline installation activities in that area, and must be carried out to the satisfaction of the Director.
- RH 4.1 Rehabilitation works following construction activities must utilise stockpiled topsoil and vegetative matter from areas of disturbed populations of threatened flora species in such a manner as to retain viable seeds, other propagules and soil microflora to the greatest extent practicable.
- RH 5.1 Fertiliser must not be used in areas where threatened orchids may occur.

Fire management

- WF 1.1 The CEMP must include details of proposed measures and procedures for fire management.
- 1.2 The CEMP must include, but is not limited to, details of the following:
- (a) measures to manage wildfires; and
 - (b) procedures for reducing the spread of *Phytophthora cinnamomi* during fire fighting.

Atmospheric emissions management

- AM 1.1 Construction activities must be managed using such measures as are necessary to prevent dust emissions causing environmental nuisance. Such measures may include, but are not limited to, the following:
- (a) using a dust suppression method such as watering dust generating surfaces; and
 - (b) ceasing site preparation or construction activities in windy weather when dust may be blown in the direction of dwellings or other sensitive uses.
- AM 2.1 Vehicles carrying loads containing material which may blow or spill must be equipped with effective control measures to prevent the escape of the materials when they travel on public roads. Effective control measures may include tarpaulins and load dampening.
- AM 3.1 Cleared vegetation must not be disposed of by burning unless no other practicable disposal options are available. Any such burning must be undertaken in such a way as to prevent emissions from causing an environmental nuisance and be in accordance with any written requirements of the Director.
- AM 4.1 The person responsible must not burn any materials by means of an open fire unless authorized to do so in writing by the Director.

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Construction noise management

Noise restrictions

- NC 1.1 Construction activities within 200 metres of the affected noise sensitive premises must only occur between the following times:
- (a) 0700hrs to 1800hrs Monday to Friday; and
 - (b) 0800hrs to 1300hrs Saturday;
- unless the written consent of the occupant(s) of noise sensitive premises has been obtained.
- NC 2.1 Unless authorised elsewhere in these conditions or otherwise approved in writing by the Director, noise emissions from construction activities, when measured at any noise sensitive premises and expressed as the 10-minute equivalent continuous A-weighted sound pressure level must not exceed the greater of:
- (a) 35 dB(A); or
 - (b) the ambient sound pressure level from all other noise sources plus 5 dB(A).
- 2.2 Between the hours of 0700hrs and 1800hrs, Monday to Friday, or 0800hrs and 1300hrs on Saturday, for a maximum period of six consecutive months, unless authorised elsewhere in these conditions or otherwise approved by the Director, noise emissions from construction activities, when measured at any noise sensitive premises and expressed as the 10-minute equivalent continuous A-weighted sound pressure level must not exceed the greater of:
- (a) 45 dB(A); or
 - (b) the ambient sound pressure level from all other noise sources plus 10 dB(A).
- 2.3 Between the hours of 0700hrs and 1800hrs, Monday to Friday, or 0800hrs and 1300hrs on Saturday, for a maximum period of six consecutive weeks, unless otherwise approved by the Director, noise emissions from construction activities, when measured at any particular noise sensitive premises and expressed as the 10-minute equivalent continuous A-weighted sound pressure level must not exceed the greater of:
- (a) 60 dB (A); or
 - (b) the ambient sound pressure level from all other noise sources plus 20dB(A).
- 2.4 The time interval over which noise levels are averaged must be 10 minutes.
- 2.5 Measured noise levels must be adjusted for tonality, impulsiveness, modulation and low frequency in accordance with the Tasmanian Noise Measurement Procedures Manual.

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- 2.6 All methods of measurement must be in accordance with the Tasmanian Noise Measurement Procedures Manual.
- NC 3.1 Any equipment used on the site must comply with the specified noise emission limits contained in the *Environmental Management and Pollution Control (Miscellaneous Noise) Regulations 2004*.

Blasting

- NC 4.1 The occupiers of all noise sensitive premises within 200 metres of a proposed blasting event must be notified at least 24 hours prior to the blasting event commencing.
- NC 5.1 Blasting may only take place between the hours of 1000hrs and 1600hrs, Monday to Friday. No blasting is permitted on Saturday, Sunday or gazetted public holidays observed statewide.
- NC 6.1 Blasting must be carried out in accordance with blasting best practice environmental management principles, and must be carried out such that, when measured at the nearest noise sensitive premises, air blast and ground vibration comply with the relevant criteria of Australian Standard AS2187.:
- NC 7.1 All blasting events must be monitored for both ground vibration and airblast over-pressure.
- NC 8.1 All measurements of airblast overpressure and peak particle velocity must be carried out in accordance with the methods set down in *Technical basis for guidelines to minimise annoyance due to blasting overpressure and ground vibration*, Australian and New Zealand Environment Council, September 1990.
- NC 9.1 Results of all blast monitoring must be forwarded to the Director within 24 hours following the blast.

Underwater blasting

- NC 10.1 No underwater blasting is permitted, unless an Underwater Blasting Plan has been prepared and submitted as prescribed below and the plan has been approved in writing by the Director.
- 10.2 The Underwater Blasting Plan must be submitted to the Director for approval prior to blasting commencing.
- 10.3 The plan must include, but is not limited to, details of the following:
- (a) justification for why blasting is required;
 - (b) the number, locations, timing and magnitude of proposed underwater blasts;
 - (c) potential impacts that the blasting may produce;

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- (d) mitigation measures that will be put in place to avoid or mitigate potential impacts;
 - (e) a monitoring programme to monitor impacts due to the blasting; and
 - (f) a reporting program to regularly advise the Director of the results of the plan.
- 10.4 The approved plan, as amended from time to time with the approval of the Director, must be implemented to the satisfaction of the Director.
- 10.5 The plan must be made publicly available.

Commissioning and operational noise management

Noise restrictions

- NO 1.1 After the commencement of commissioning, combined noise emissions from the water supply activity when measured at any noise sensitive premises and expressed as the equivalent continuous A-weighted sound pressure level must not exceed:
- (a) 45 dB(A) between the hours of 0700hrs and 1800hrs (Day time); or
 - (b) 40 dB(A) between the hours of 1800hrs and 2200hrs (Evening time); or
 - (c) 35 dB(A) between the hours of 2200hrs and 0700hrs (Night time).
- 1.2 If the combined level of noise from the water supply activity and the normal ambient noise exceeds the noise levels stated above, this condition will not be considered to be breached unless the noise emissions from the activity are audible and exceed the ambient noise level by at least 5 dB(A).
- 1.3 The time interval over which noise levels are averaged must be 10 minutes.
- 1.4 Measured noise levels must be adjusted for tonality, impulsiveness, modulation and low frequency in accordance with the Tasmanian Noise Measurement Procedures Manual.
- 1.5 All methods of measurement must be in accordance with the Tasmanian Noise Measurement Procedures Manual.
- NO 2.1 All air release valves, flow control valves and pump stations on the pipeline must be specifically designed to mitigate adverse noise impacts on surrounding areas.

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Waste and hazardous materials

- WM 1.1 The generation of waste must be avoided as far as is practicable in accordance with best practice environmental management.
- 1.2 Wastes must be managed in accordance with the following hierarchy of waste management:
- (a) waste must be minimised, that is, the generation of waste must be reduced to the maximum extent that is practicable, having regard to best practice environmental management;
 - (b) waste must be re-used or recycled to the maximum extent that is practicable; and
 - (c) waste that cannot be re-used or recycled must be disposed of at a waste depot site or treatment facility that has been approved in writing by the Director to receive such waste, or otherwise in a manner approved in writing by the Director.
- WM 2.1 The storage and transportation of dangerous goods or controlled waste within the construction corridor must be kept to the minimum practicable.
- WM 3.1 All containers containing dangerous goods or controlled waste must, as far as practicable, be located within impervious bunded areas or spill trays of appropriate capacity, and in accordance with relevant Australian Standards, including AS 1940 and AS 2507, and in accordance with any written requirements of the Director.
- WM 4.1 The CEMP must include details of proposed measures and procedures for the avoidance and management of chemical and hydrocarbon spills.
- WM 5.1 Spill kits appropriate for the types and volumes of materials being handled in the vicinity must be kept in appropriate locations to assist with the containment of spilt environmentally hazardous materials.
- WM 6.1 Portable toilet facilities must be provided and maintained at all major work sites, including major watercourse crossings and hydrotest locations.

Trevallyn Nature Recreation Area

- TR 1.1 Prior to the commencement of construction activities on land owned by the Crown between Lake Trevallyn and the northern crossing of Reatta Road, or by a date specified by the Director, a proposed construction timetable must be submitted to the Director and the PWS Regional Manager.
- TR 2.1 Within the construction corridor on land owned by the Crown between Lake Trevallyn and the northern crossing of Reatta Road, the following must occur:

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- (a) the pipeline must be constructed within existing cleared land to the greatest extent practicable;
 - (b) unless otherwise approved in writing by the Director, the pipeline must be constructed above ground between Lake Trevallyn and a location approximately 75 metres south of Lake Trevallyn Road, and below ground to the north of this location;
 - (c) where the pipeline is located above ground, adequate space (at frequent intervals) for fauna movement under the pipeline must be provided to the satisfaction of the PWS Regional Manager; and
 - (d) all assets (including without limitation, roads, vehicle tracks, carparks, walking tracks, footpaths and fencing) which are damaged or disturbed in the course of construction of the water supply pipeline must be reinstated to their former condition, and to meet all relevant standards.
- TR 3.1 Vehicular access across the Trevallyn Nature Recreation Area must not occur unless it is authorised by a permit issued by the PWS Regional Manager.
- TR 4.1 Rehabilitation of any area of the Trevallyn Nature Recreation Area disturbed by the temporary access must occur as soon as practicable following the completion of construction and must be to the satisfaction of the PWS Regional Manager.
- TR 5.1 Construction activities must not take place between Lake Trevallyn and the northern crossing of Reatta Road on days of total fire ban, as proclaimed by the Tasmania Fire Service.
- TR 6.1 Where open rocky habitat south of Lake Trevallyn Road is disturbed, the habitat must be rehabilitated to a state suitable for herpetofauna.
- TR 7.1 A weed eradication program must be undertaken prior to any construction activities within the construction corridor on land owned by the Crown between Lake Trevallyn and the northern crossing of Reatta Road. The program must particularly target gorse, blackberry, boneseed and Spanish heath.

Communications Plan

- TR 8.1 Prior to the commencement of construction activities on land owned by the Crown between Lake Trevallyn and the northern crossing of Reatta Road, or by a date specified in writing by the Director, a Trevallyn Nature Recreation Area Communications Plan must be submitted to the Director for approval. The plan must include, but is not limited to, details of the following:
- (a) the timing and manner by which interested parties will be informed about the duration and potential impact of the activity as relates to their interest in the land owned by the Crown. Interested parties include but are not limited to the following

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local community groups and businesses closely associated with the Trevallyn Nature Recreation Area:

- i) Friends of Trevallyn Reserve;
 - ii) Paringa Archers;
 - iii) Way FM;
 - iv) Northern Aquatic Club;
 - v) Disrow;
 - vi) Lifesavers;
 - vii) Esk Valley Orienteering Club;
 - viii) Launceston Pony and Riding Club;
 - ix) the cable hang-gliding operation;
 - x) neighbouring landholders;
 - xi) neighbouring infrastructure owners (eg Esk Water and Hydro Tasmania); and
 - xii) private renters within the Trevallyn Reserve.
- (b) a process for receiving and resolving any concerns of interested parties that relate to construction activities on or near land owned by the Crown.

- 8.2 Construction activities on land owned by the Crown between Lake Trevallyn and the northern crossing of Reatta Road must not commence unless the plan has been approved in writing by the Director. Notwithstanding the above, some construction activities may take place prior to the approval of the plan provided that the sections of the plan relevant to those activities are considered satisfactory by the Director, and provided that the Director has given written authority for those construction activities to take place.
- 8.3 The approved Trevallyn Nature Recreation Area Communications Plan, as amended from time to time with the approval of the Director, must be implemented to the satisfaction of the Director.
- 8.4 The plan must be made publicly available.

Visual Management Plan

- TR 9.1 Prior to the commencement of construction activities on land owned by the Crown between Lake Trevallyn and the northern crossing of Reatta Road, or by a date specified in writing by the Director, a Trevallyn Nature Recreation Area Visual Management Plan must be submitted to the Director for approval. The plan must be developed in consultation with the PWS Regional Manager. The plan must include, but is not limited to, details of the following:
- (a) the location of screen planting to reduce the visual impact of infrastructure or cleared corridors when viewed from tracks, roads or adjacent properties;
 - (b) the colour and treatment of the exterior of the balancing tank and pipeline to minimise its visual impact;

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- (c) operational procedures for managing graffiti on the balancing tank and pipeline (for example; use of sacrificial paint, cleaning regimes, murals); and
 - (d) the design and colour of fencing to minimise its visual impact.
- 9.2 Construction activities on land owned by the Crown between Lake Trevallyn and the northern crossing of Reatta Road must not commence unless the plan has been approved in writing by the Director. Notwithstanding the above, some construction activities may take place prior to the approval of the plan provided that the sections of the plan relevant to those activities are considered satisfactory by the Director, and provided that the Director has given written authority for those construction activities to take place.
- 9.3 The approved plan, as amended from time to time with the approval of the Director, must be implemented to the satisfaction of the Director.
- 9.4 The plan must be made publicly available.

Flora Offset Plan

- TR 10.1 Prior to the commencement of construction activities on land owned by the Crown between Lake Trevallyn and the northern crossing of Reatta Road, or by a date specified in writing by the Director, a Trevallyn Nature Recreation Area Flora Offset Plan must be submitted to the Director for approval. The plan must include, but is not limited to, details of the following:
- (a) an area of vegetation (i.e. trees, shrubs and understorey species of local provenance) at least equivalent to the area cleared or disturbed during the construction activities on land owned by the Crown between Lake Trevallyn and the northern crossing of Reatta Road, to be replanted either on the disturbed land or adjacent Trevallyn Nature Recreation Area;
 - (b) a detailed planting plan indicating proposed plant species for planting, pot sizes, planting locations and planting techniques;
 - (c) the strategy for the establishment and maintenance of the new plantings (i.e. wildlife exclusion fencing, weed control, watering, replacement); and
 - (d) consultation with the Friends of Trevallyn Reserve in regard to species, locations and techniques for planting.
- 10.2 Construction activities on land owned by the Crown between Lake Trevallyn and the northern crossing of Reatta Road must not commence unless the plan has been approved in writing by the Director. Notwithstanding the above, some construction activities may take place prior to the approval of the plan provided that the sections of the plan relevant to those activities are considered satisfactory by the Director, and provided that the Director has given written authority for those construction activities to take place.

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- 10.3 The approved plan, as amended from time to time with the approval of the Director, must be implemented to the satisfaction of the Director.
- 10.4 The plan must be made publicly available.

Aboriginal heritage

- AH 1.1 The CEMP must include details of proposed measures and procedures for the protection and management of Aboriginal heritage.
- 1.2 The CEMP must include, but is not limited to, details of the following in relation to the protection and management of Aboriginal heritage:
- (a) procedures for the identification and protection and future management of Aboriginal heritage relics;
 - (b) procedures to avoid impact to Aboriginal heritage relics when locating roads and other infrastructure, including provision for additional field studies of the preferred location of such infrastructure if not previously part of a field study;
 - (c) procedures that will be followed in the event that further Aboriginal heritage relics are located during construction activities or during further investigations, including a commitment to avoid impact on Aboriginal heritage relics to the greatest extent practicable; and
 - (d) procedures for ongoing engagement with the Aboriginal community, through the Tasmanian Aboriginal Land and Sea Council, in the identification, assessment, protection and ongoing management of identified Aboriginal heritage relics and any further Aboriginal heritage relics that are located.
- AH 2.1 Specific locations of Aboriginal heritage relics must be kept confidential to the satisfaction of the Director of National Parks and Wildlife.
- AH 3.1 In the event that further Aboriginal heritage relics are located during construction activities the person responsible must:
- (a) cease construction activities immediately within 100 metres of the relic;
 - (b) notify the Aboriginal Heritage Office within 24 hours;
 - (c) assess the characteristics, condition and heritage value of the relics using suitably qualified specialists;
 - (d) arrange a field inspection with staff from the Aboriginal Heritage Office, if necessary, to identify regulatory implications and options for dealing with the Aboriginal heritage relic;
 - (e) engage with the Tasmanian Aboriginal Land and Sea Council on assessment and management options, as required;
 - (f) determine appropriate actions with regard to the continuation of works, including, as appropriate, gaining approval of a permitted action; and

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(g) not recommence construction activities until written approval is received from the Director of National Parks and Wildlife.

- AH 4.1 Interference for the purpose of undertaking controlled archaeological excavation and/or removal of any Aboriginal heritage relics must be undertaken or supervised by an Aboriginal heritage specialist approved by the Director of National Parks and Wildlife.
- AH 5.1 Results of any surveys, controlled archaeological excavation and/or removal of the Aboriginal heritage relics must be fully documented to a professional standard. The documentation must be submitted to the Aboriginal Heritage Office for the purpose of updating the record(s) of an Aboriginal heritage site within 30 days of the completion of works, or by a date specified in writing by the Aboriginal Heritage Office. All material derived from the controlled archaeological excavation or retrieval must be professionally curated and documented, and submitted to the Aboriginal Heritage Office prior to its return to the Aboriginal community. All retained material derived from the controlled archaeological excavation must be stored and protected at a standard approved by the Director of National Parks and Wildlife.

Ongoing management and protection

- AH 6.1 The OEMP must include details of proposed measures and procedures for the ongoing protection and management of Aboriginal heritage relics.
- 6.2 The OEMP must include, but is not limited to, details of the following:
- (a) procedures for the ongoing protection and management of Aboriginal heritage relics;
 - (b) procedures that will be followed in the event that further Aboriginal heritage sites are located during future activities, including a commitment to avoid impact on Aboriginal heritage relics to the extent practicable; and
 - (c) procedures that will be followed for ongoing engagement with the Aboriginal community, through the Tasmanian Aboriginal Land and Sea Council, in the identification, assessment, protection and ongoing management of identified Aboriginal heritage relics and any further Aboriginal heritage relics that are located.

Historic heritage

- HH 1.1 The CEMP must include details of proposed measures and procedures for the management of historic cultural heritage places. The plan must provide site specific recommendations for the protection of places entered in the Tasmanian Heritage Register as well as other known historic cultural heritage places that may be discovered during construction.

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- 1.2 The CEMP must include, but is not limited to, details of the following:
- (a) exclusion zones to be imposed and maintained around known historic cultural heritage places;
 - (b) management measures that will be undertaken if blasting activities are to occur within 50 metres of historic cultural heritage places, including details of peak particle velocity limits being used;
 - (c) the process for visual monitoring of construction activities to detect previously unidentified historic cultural heritage places; and
 - (d) procedures to be implemented in the event that further historic cultural heritage places are located during construction activities.
- HH 2.1 In the event that additional terrestrial, underwater or maritime historical cultural heritage places are located during construction activities the following procedure must be implemented:
- (a) cease construction activities immediately within 100 metres of the place;
 - (b) notify the Director within 24 hours;
 - (c) assess the significance of the place utilising an appropriately qualified specialist;
 - (d) determine appropriate actions with regard to the continuation of works; and
 - (e) construction activities must not recommence until written approval is received from the Director.

Decommissioning and rehabilitation

- DR 1.1 The person responsible must notify the Director in writing of any event or decision which is likely to give rise to the permanent cessation of all or part of the activity within 14 days of becoming aware of that event or decision. The notice must specify the date upon which the activity is expected to cease.
- DR 2.1 A draft Decommissioning and Rehabilitation Plan (DRP) must be submitted for approval to the Director within 3 years of completion of commissioning of the activity, or by a date specified in writing by the Director. Unless otherwise approved in writing by the Director, a revised DRP must be submitted to the Director:
- (a) when required to reflect significant changes in rehabilitation and decommissioning obligations arising from changes to the activity; or
 - (b) within 30 days of the Director being notified of the planned cessation of operations; or
 - (c) by a date specified in writing by the Director.

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- 2.2 The DRP must be prepared in accordance with guidelines issued by the Director. If no guidelines have been issued by the Director the measures described in this plan must include, but are not limited to, details of the following:
- (a) the completion of a site history, site contamination assessment and contamination remediation plan (including consideration of groundwater);
 - (b) the removal of all equipment, structures and waste materials unless they are considered by the Director to be beneficial to a future use of the site;
 - (c) the grading and levelling/recontouring and revegetating (or other approved method of soil stabilisation) of the surface of the disturbed area;
 - (d) management of drainage on the site so as to reduce erosion and prevent release of a pollutant from the site;
 - (e) maintenance of the rehabilitated area for a period of not less than three years from the date of cessation of operations;
 - (f) rehabilitation of the riverbed where the pipeline crosses the Tamar River;
 - (g) an itemised estimate of the costs of carrying out the works listed in the DRP and a statement of how these costs will be provided for; and
 - (h) any other detail requested in writing by the Director.
- DR 3.1 Following permanent cessation of the activity, rehabilitation of the land must be carried out in accordance with the most recent Decommissioning and Rehabilitation Plan approved by the Director.
- 3.2 The plan must be made publicly available.

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ANNEX D1 – FURTHER INFORMATION

Table 1 – Further information

Number	Description	Details	Date received
RFI 001(a)	Analyses of data from marine benthic monitoring around the proposed outfall of the Gunns Pulp Mill – Report prepared for Aquenal Pty Ltd Feb 2007	Report by Dr Leon Barmuta, University of Tasmania	20 July 2007
RFI 005	Updated details following design alterations to mill specifications based on the selection of equipment suppliers	Memo from Poyry to Gunns dated 11 May 2007 Ref 16B0104	14 May 2007
RFI 012	Response to request for clarification of the location and width of the water supply pipeline, the location of the balancing tank, the degree of revegetation proposed and the configuration of the above ground sections of the pipeline within the Trevallyn Reserve	Written information, Maps	18 May 2007
RFI 018	Response to request for confirmation of option for wharf design	Written information	26 May 2007
RFI 025	Elementary analysis of native and plantation eucalypt and pine	AST report HSL report	30 May 2007
RFI 026(a)	Response to request for details of mill site preparation equipment, construction operating hours and construction noise	Written information	31 July 2007
RFI 026(b)	Revised site preparation/excavation plan	Plan	31 July 2007
RFI 027(a)	Revised proposed site layout plan	Plan	8 June 2007
RFI 027(b)	Details of proposed transmission line location	Map	8 June 2007
RFI 027(c)	Details of proposed vegetation clearance area	Map	8 June 2007
RFI 028	Response to request for information regarding chlorate production in the chemical plant and amount and composition of gaseous, liquid and solid emissions from the chemical plant	Written information	7 June 2007
RFI 029(a)	Response to request for information regarding conditions at the edge of the mixing zone in Bass Strait	EnviroGulf report to Gunns dated 5 June 2007, Ref Gunss/LH/05062007	4 June 2007
RFI 029(b)	Response to request for information regarding conditions at the edge of the mixing zone in Bass Strait	Poyry report to Gunns dated 7 June 2007, Ref 16B0104	4 June 2007
RFI 029(c)	Response to request for information regarding conditions at the edge of the mixing zone in Bass Strait	GHD memo to Gunns dated 7 June 2007, Ref 41/16384/359359	4 June 2007
RFI 030	Additional information about the hydrodynamic model for Bass Strait	GHD report,	14 June 2007

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		Patterson-Britton report	
RFI 031	Gunns response to concerns raised by Professor Andrew Wadsley	Toxikos report to Gunns dated 4 July 2007, Ref TR170607-RJF	6 July 2007
RFI 033(a)	Detailed plan for the location of and design of the landfill, reservoir, quarry and infrastructure connections	Plan	10 August 2007
RFI 033(b)	Detailed plan for the bale warehouse	Plan	10 August 2007
RFI 033(c)	Detailed plan for the wharf, office and wharf amenities	Plan	10 August 2007
RFI 033(d)	Response to request for details of amount of wood chips produced on site and amount imported from other chip mills	Written information.	10 August 2007
RFI 035	Response to request for information about chemical plant emission points and predicted emissions for base-case and merchant-base production levels	Written information	27 July 2007
RFI 036	Response to request for information about the chemical plant	Written information	31 July 2007
RFI 037(a)	Details of the effect of the reduced scale of earthworks on 24 hour construction	Written information.	10 August 2007
RFI 037(b)	Details of various chemical processes and emissions from the chemical plant	Written information, Flow diagram	10 August 2007
	Information from Gunns regarding layout changes at the mill site for an improved environmental outcome	Written information, Plan	8 May 2007
	Map from Gunns showing the areas for revocation and construction corridors in Trevallyn Reserve	Map L07131_TrevallynRevocationMap1_Rev04	17 June 2007
	Details of concurrency and use of data for calibration/verification of the hydrodynamic model	Written text	18 June 2007
	Map from Gunns showing the areas for revocation and construction corridors in Trevallyn Reserve	Map L07131_TrevallynRevocationMap2_Rev04	27 June 2007

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ANNEX M1 – PARAMETERS AND ANALYSES FOR CONSTRUCTION MONITORING IN STATE WATERS

Parameters/Analyses	
Column 1	Column 2
Sediment Quality	Water Quality
Particle size Weak acid extraction Arsenic* Cadmium* Chromium* Cobalt* Copper* Lead* Manganese* Nickel* Vanadium* Zinc* Total organic carbon Redox	Dissolved oxygen Turbidity pH Total suspended solids Total nitrogen Ammonia Kjeldahl nitrogen Total phosphorous Reactive phosphorous Total organic carbon Dissolved organic carbon Arsenic* Barium* Beryllium* Cadmium* Cobalt* Nickel* Chromium* Copper* Lead* Zinc* Manganese* Vanadium* Mercury*
Note: *Sediments must be analysed for total metals. Water samples must be analysed for both total and dissolved metals	