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23 DEC 2008
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Section 3.5.15 *Integrated Planning Act 1997*

EPA Permit[1] number: IPDE01020408

EPA Permit[1] number:	IPDE01020408
Assessment Manager:	Environmental Protection Agency
Date application received by EPA:	22-APR-2008
Permit[1] Type:	Development Approval for a MCU involving an ERA
Date of Decision:	23 December 2008
Decision:	Approved with conditions
Relevant Laws and Policies:	*Environmental Protection Act 1994* and any subordinate legislation
Jurisdiction:	Item 1 in Table 3 of Schedule 8A of the *Integrated Planning Act 1997*

Development Description

Property	Lot/Plan	Aspect of Development
Port Hinchinbrook, Bruce Highway, Cardwell	<u>Sewage treatment plant</u>: Lot 1 Plan C1043 <u>Irrigation area</u>; part of Lot 5 RP732868; part of Lot 6 RP732868; part of Lot 7 RP732868; part of Lot 1 RP739118; part of Lot 2 RP739118; part of Lot 170 SP177389, as depicted in **Figure 1 Port Hinchinbrook Effluent Irrigation System Schematic** of this approval.	ERA 15(b) Sewage Treatment - operating a standard sewage treatment works having a peak design capacity to treat sewage of 100 or more equivalent persons but less than 1 500 equivalent persons.

Additional comments or advice about the application

Please note that the following documents are also relevant to this permit:

- *"Port Hinchinbrook Effluent Irrigation Area – Assessment Report, Prepared for Williams Corporation Pty Ltd, Revision 4 FINAL"*, 17 October 2008, Maunsell Australia Pty Ltd.

Additional information for applicants

The standard currency periods stated in section 3.5.21 of the *Integrated Planning Act 1997* or the nominated currency period, apply to each aspect of development in this permit[1]. For information on when this permit[1] takes effect and the relevant currency periods, please see point 3 in the Notice of Decision.

[1] Permit includes licences, approvals, permits, authorisations, certificates, sanctions or equivalent/similar as required by legislation administered by the Environmental Protection Agency and Queensland Parks and Wildlife.

Contaminated Land

It is a requirement of the *Environmental Protection Act 1994* that if an owner or occupier of land becomes aware a Notifiable Activity (as defined by Schedule 2 of the *Environmental Protection Act 1994*) is being carried out on the land or that the land has been affected by a hazardous contaminant, they must, within 30 days after becoming so aware, give notice to the Environmental Protection Agency.

Environmentally Relevant Activities

The aforementioned description of any environmentally relevant activity (ERA) for which this permit is issued is simply a restatement of the ERA as prescribed in the legislation at the time of issuing this permit. Where there is any conflict between the abovementioned description of the ERA for which this permit is issued and the conditions specified herein as to the scale, intensity or manner of carrying out of the ERA, then such conditions prevail to the extent of the inconsistency.

This permit authorises the ERA. It does not authorise environmental harm unless a condition within this permit explicitly authorises that harm. Where there is no such condition, or the permit is silent on a matter, the lack of a condition or silence shall not be construed as authorising harm.

In addition to this permit, the person to carry out the ERA must be a registered operator under the *Environmental Protection Act 1994*. For the person to become a registered operator, they must apply for a registration certificate under section 73F of the *Environmental Protection Act 1994*.

Delegate
Environmental Protection Agency
23 December 2008

CONDITIONS OF APPROVAL

Agency Interest: General

G1: **Replacement of development approval NR0560DA**
This development approval for the carrying out of *Environmentally Relevant Activity (ERA) 15(b) - Sewage Treatment* replaces the development approval No. NR0560DA for *ERA 15(b) Sewage Treatment* previously issued by the Environmental Protection Agency on 26 October 2004.

G2: Commissioning of the initial stage of a new irrigation area on Lots 5, 6, and 7 on RP732868, Lots 1 and 2 RP739118 and Lot 170 SP177389 as described in condition L3 and **Table 2 Staging of Irrigation Areas** of this approval is required before Lot 2 on CWL1212, Lot 3 on C1043, Lot 41 on C1043, Lot 42 on C1043 and Lot 3 on RP733367 (existing irrigation areas) may be used for purposes other than disposal of treated sewage effluent.

G3: **Prevent and/or minimise likelihood of environmental harm.**
In carrying out an ERA to which this approval relates, all reasonable and practicable measures must be taken to prevent and / or to minimise the likelihood of environmental harm being caused.

G4: **Maintenance Of Measures, Plant and Equipment.**
The operator of an ERA to which this approval relates must:

(a) install all measures, plant and equipment necessary to ensure compliance with the conditions of this approval; and
(b) maintain such measures, plant and equipment in a proper and efficient condition; and
(c) operate such measures, plant and equipment in a proper and efficient manner.

G5: **Alterations**
No change, replacement or operation of any plant or equipment is permitted if the change, replacement or operation of the plant or equipment increases, or is likely to substantially increase, the risk of environmental harm above that expressly provided for by this development approval.

G6: **Records**
Record, compile and keep all monitoring results and reports required by this development approval and present this information to the administering authority when requested.

G7 All records required by this approval must be kept for 5 years.

G8: **Annual Monitoring Report**
A report must be prepared each year and be provided to the administering authority with the annual return for the registration certificate. The annual monitoring report must include, but is not limited to the following matters:

(a) A summary of the previous twelve months monitoring results obtained in accordance with any of the monitoring requirements of this development approval and, in graphical form showing relevant limits, a comparison of the previous twelve months monitoring results to both the limits specified in this development approval and to relevant prior results; and
(b) An evaluation/explanation of the data from any monitoring programs; and
(c) A summary of the records of any equipment failures or events recorded; and
(d) An outline of actions taken or proposed to minimise the environmental risk from any deficiency identified by the monitoring or recording programs; and
(e) The number of new tenements connected to the sewage treatment works during the previous twelve months and the total number of connections; and
(f) A summary of any recycled water agreements entered into or amended during the year.

G9 **Site Based Management Plan**
A Site Based Management Plan (SBMP) must be implemented that provides for the effective management of the actual and potential environmental impacts resulting from the carrying out of the activity to which this development approval relates. Documentation relating to the SBMP must be kept.

G10 The Site Based Management Plan must provide for at least the following functions:

1. Staff training in awareness of the environmental issues related to the activities and operational procedures and responsibilities for minimising potential impacts;
2. An environmental policy and commitments to best practice environmental management of the activities and including specific performance targets and objectives;
3. Control procedures to be implemented for routine operations for day to day activities to minimise the likelihood of environmental harm, however occasioned or caused;
4. Contingency plans and emergency procedures to be implemented for non-routine situations to deal with foreseeable risks and hazards, including corrective responses to prevent and mitigate environmental harm (including any necessary site rehabilitation);
5. Organisational structure and resonsibility to ensure that roles, responsibilities and authorities are appropriately defined to ensure effective management of environmental issues;
6. Effective communication procedures to ensure two-way communication on environmental matters between operational staff and higher management;
7. Monitoring of contaminant releases to the environment including procedures, methods and record keeping and investigaiton into the environmentl impact of any release that causes ir is likely to cause serious or material environmental harm;
8. A Stormwater Management Plan which has the objective of avoidance and minimisation of contaminated stormwater;
9. A Waste Management Plan which addresses at least the following matters:
   (a) The sources, types and quantities of waste generated; and
   (b) Management of waste in accordance with the waste management helerarchy (section 10 of the Environmental Protection (Waste management) Policy 2000); and
   (c) Procedures for dealing with accidents, spills and other incidents that may impact on waste management; and
10. The periodic review or environmental performance and procedures, not less frequently than annually; and
11. A program for continuous improvement.

G11 The Site Based Management Plan must not be implemented or amended in a way that contravenes any condition of this approval.

G12 **Notification**
Notify the administering authority as soon as practicable after becoming aware of any release of contaminants that occurs other than in acordance with the conditions of this development approval, or any event where environmental harm is caused or threatened.
Please Note: The EPA Pollution Hotline (1300 130 372) is the most appropriate contact for pollution incidents.

1. Written advice detailing the following information must be provided to the administeing authority within fourteen (14) days following any notification in accordance with condition G12:
2. The name of the operator, including their approval / registration certificate number; and
3. The name and telephone number of a designated contact person; and
4. The quantity and substance released; and
5. The time of the release/event; and
6. The time the registered operator became aware of the release/event; and
7. The results of any sampling performed in relation to the release/event; and
8. Actions taken to mitigate any environmental harm (including environmental nuisance) caused by the release/event; and
9. Proposed actions to prevent a recurrence of the release/event.

G13 **Monitoring.**
A competent person(s) must conduct any monitoring required by this approval.

G14 **Equipment Calibration.**
All instruments, equipment and measuring devices used for measuring or monitoring in accordance with any condition of this approval must be calibrated, and appropriately operated and maintained.

G15 **Sample Analysis**
All analyses and tests required to be conducted under this development approval must be carried out by a laboratory that has NATA certification for such analysis and tests, except as otherwise authorised by the administering authority.

G16 **Trained / Experienced Operator(s)**
The daily operation of the waste water treatment system and pollution control equipment must be carried out by a person(s) with appropriate experience and/or qualifications to ensure the effective operation of that treatment system and control equipment.

G17 **Treatment Plant Capacity**
This development approval authorises sewage treatment using plant and equipment with a maximum design capacity to treat sewage influent from less than 1500 equivalent persons.

Agency Interest: Air

A1 **Nuisance.**
The release of noxious or offensive odours or any other noxious or offensive airborne contaminants resulting from the activity must not cause a nuisance at any nuisance sensitive or commercial place.

Agency Interest: Land

L1 **Irrigation System Design**
Before the use of the effluent irrigation area on Lots 5, 6, and 7 RP732868, Lots 1 and 2 RP739118 and Lot 170 SP177389 commences, the administering authority must be provided with designs of the irrigation system for the entire effluent disposal area, which details buffer distances between the areas of irrigation and environmentally sensitive areas.

L2 **Land Disposal.**
The only contaminants permitted to be released to land are treated sewage wastewater from Port Hinchinbrook to the areas shown in **Figure 1 Port Hinchinbrook Effluent Irrigation System Schematic** and which complies with the quality limits stated in **Table 1 - Contaminant Release Limits to Land** and the conditions of this approval.

Table 1 Contaminant Release limits to Land

	Release Limit

Quality characteristics	Minimum	50th Percentile	Maximum
Suspended Solids			5 mg/L
5-Day Biochemical Oxygen Demand			10 mg/L
Total Nitrogen		5 mg/L	10 mg/L
Total Phosphorous		1 mg/L	2 mg/L
Faecal Coliform		10 Colony forming units per 100ml	100 Colony forming units per 100ml
pH	6.5 pH units		8.5 pH units
Dissolved Oxygen *	2 mg/L		

* Dissolved oxygen testing may be conducted *in situ*

L3 **Staging of Development**
For the purposes of staging the development at Port Hinchinbrook, the provision of land and wet weather storage, the commissioning of irrigation systems is to be staged in the following manner on Lot 5 RP732868, Lot 6 RP732868, Lot 7 RP732868, Lot 1 RP739118, Lot 2 RP739118 and Lot 170 SP177389 as detailed in **Table 2 Staging of Irrigation Areas**, and **Figure 1 Port Hinchinbrook Effluent Irrigation System Schematic:**

Table 2 Staging of Irrigation Areas

DEVELOPMENT STAGE	Equivalent persons (EP)	Area (hectares)	Wet Weather Storage
Initial stage at commencement	200	6.0	1.5 megalitres
STAGE A1	500	15.0	4.5 megalitres
STAGE A2	1000	30.0	7.5 megalitres
STAGE B1	1500	46.0	9.0 megalitres

L4 The volume of treated sewage wastewater irrigated within each stage must not exceed the volume for the equivalent persons for each stage.

L5 **Monitoring**
Monitoring must be undertaken and records kept of a monitoring program of contaminant releases to the irrigation area at the monitoring points, frequency, and for the parameters specified in **Table 3 Monitoring program.**

Table 3 Monitoring program

Monitoring point	Quality characteristics	Units	Frequency

Outlet from effluent storage tanks when a discharge occurs.	Suspended Solids	mg/L	Monthly
	5 Day - Biological Oxygen Demand	mg/L	Monthly
	Total Nitrogen	mg/L	Monthly
	Total Phosphorous	mg/L	Monthly
	Faecal Coliform	Colony forming units per 100 millilitres	Monthly
	pH	pH units	Weekly
	Dissolved Oxygen*	mg/L	Weekly

* Dissolved oxygen testing may be conducted *in situ*

L6 All determinations of the quality of contaminants released to land must be made in accordance with methods prescribed in the latest edition of the Environment Protection Agency Water Quality Sampling Manual, and carried out on samples that are representative of the discharge.

L7 Notwithstanding the quality characteristic limits specified in **Table 1 Contaminant Release Limits to Land**, releases of effluent must not have any properties nor contain any organisms or other contaminants in concentrations that are capable of causing environmental harm.

L8 The daily volume of contaminants released to land must be determined or estimated by an appropriate method, for example a flow meter, and records kept of such determinations and estimates.

L9 An Irrigation Management Program (IMP) must be developed that ensures sustainable long-term use of the effluent irrigation area. The IMP must address at least the following matters:

(a) irrigation scheduling;
(b) effluent allocation to the contaminant release area;
(c) management of the predicted effect on soil conditions;
(d) management of the nutrient balance, including sustainable loads of Nitrogen and Phosphorous;
(e) management of the salt balance;
(f) managing impacts on existing native vegetation;
(g) physical inspection timetables;
(h) nomination of a responsible person to manage and inspect the effluent irrigation area on a regular basis; and
(i) managing potential impacts on water quality in adjacent areas.

L10 The IMP must be submitted to the EPA prior to commissioning of the irrigation area that is the subject of this development approval.

L11: The irrigation of treated wastewater must be carried out in a manner such that:

(a) No irrigation is carried out within 50 metres of Two Mile Creek and/or within 30 metres of any other watercourse or for above ground irrigation within 10 metres of the property boundary;
(b) Vegetation is not damaged;
(c) Soil erosion and soil structure damage is avoided;
(d) There is no surface ponding of wastewater;
(e) Percolation of wastewater beyond the plant root zone is minimised;
(f) The capacity of the land to assimilate nitrogen, phosphorus, salts, organic matter (as measured by biochemical or chemical oxygen demand) and other contaminants is not exceeded;
(g) The quality of groundwater is not adversely affected; and
(h) Spray from any irrigation of treated wastewater must not drift beyond the property boundary.

L12: All reasonable and practicable steps must be taken to ensure that persons are not likely to be exposed to pathogens in treated wastewater being used for irrigation, by such means as:

(a) Selection of irrigator equipment with low exposure risk;
(b) Appropriate timing of irrigation;
(c) Restriction of access to areas either being irrigated or that are freshly irrigated;
(d) Monitoring relevant groundwater quality indicators from any potentially affected bores;
(e) Notices prominently displayed on areas undergoing wastewater irrigation, warning the public that the area is irrigated with treated wastewater and to avoid contact and not to use or drink the wastewater;
(f) Maintaining effective separation between wastewater aplication aras and boundaries, sensitive areas and bores; and
(g) Fitting lockable valves or removable handles to all treated wastewater release pipes situated in public access areas.

L13 All chemicals, fuels and other liquid contaminants must be contained within and on-site containment system and controlled in a manner that prevents environmental harm and in accordance with AS4326 - *Storage and Handling of Oxidising Substances,* AS1940 – *Storage and handling of Flammable and Combustible Liquids* and AS3780 – *The Storage and handling of Corrosive Substances.*

L14 **Acid Sulfate Soils**
Comply with the measures included in the State Planning Policy relating to acid sulfate soil (Currently *State Planning Policy 2/02, Planning and Managing Development Involving Acid Sulfate Soils*) when treating and managing acid sulfate soils.

L15 **Use of Wet Weather Storages**
All wet weather storages must be operated and maintained in a manner that maximises the available storage capacity for circumstances when wet weather conditions prevent the irrigation of treated effluent.

L16 When conditions prevent the irrigation of treated effluent to land (during or following rain events, or when wind speed is sufficient to carry spray droplets or aerosols from irrigators beyond the boundary of the authorised irrigation area identified in **Figure 1 Port Hichinbrook Effluent Irrigation System Schematic,** the contaminants must be directed to a the wet weather storage tank system adjacent to the sewage treatment plant on Lot 1 C1043.

L17 **Use of Irrigation System**
The effluent distribution system and the designated effluent irrigation area must be developed and maintained in a proper and efficient condition so as to maximise assimilation, evaporation and transpiration of the irrigated contaminants.

L18 All reasonable measures must be implemented to provide uniform distribution of contaminants over the disposal area through the irrigation system.

L19 **Groundwater monitoring**
A groundwater monitoring network must be installed for the effluent irrigation area that ensures any variability in the effluent irrigation area is incorporated (ie soil types, vegetation types, altitude, aspect etc) . The network must:

(a) be developed, installed and maintained by a person possessing appropriate qualifications and experience in the fields of hydrogeology and groundwater monitoring program design to be able to competently make recommendations about these matters; and
(b) be constructed in accordance with methods prescribed in the latest edition of the Agriculture and Resource Management Council of Australia and New Zealand manual titled "Minimum Construction Requirements For Water Bores in Australia"; and
(c) include a sufficient number of monitoring bores that provide the following:
    (i) representative groundwater samples from the uppermost aquifer, and other potentially affected aquifers,
    (ii) existing groundwater quality including background water quality in hydraulically up - gradient areas not affected by irrigation, and the capacity to

detect trends in groundwater quality across the effluent irrigation area; and

(iii) the quality of groundwater within the treated sewage effluent irrigation area(s); and

(iv) the quality of groundwater down gradient of any potential sources of contamination.

L20 Conduct monitoring and keep records of groundwater quality for the relevant monitoring bores required by condition L19 of this development approval. All determinations of groundwater quality must be:

(a) taken from sufficient monitoring points and/or wells to obtain representative samples of groundwater up-gradient, down-gradient, and within, the potential influence;

(b) carried out with sufficient regularity and spatial and temporal replication to make statistically valid conclusions about changes to groundwater characteristics with regard to the presence, absence or fluctuation of contaminant concentrations, and changes in standing groundwater level;

(c) carried out with sufficient number of sampling events to determine groundwater quality characteristics, standing groundwater levels prior to, and following proposed development of the site;

(d) followed by an assessment of whether or not there has been any statistically significant adverse change at locations within and hydraulically down gradient of the potential sources of contamination, compared to background values.

L21 Should contaminant levels measured in monitoring bores indicate an increase above background of 10% or greater, the EPA must be immediately notified about the monitoring results, an investigation conducted to determine whether the increase has been caused by effluent irrigation, and the results submitted to the EPA within 5 weeks from the date the administering authority was notified about the monitoring results.

L22 On any occasion that samples are obtained in accordance with condition L20, the standing groundwater levels must be measured and recorded in metres accurate to 0.01 metres. The elevation of the reference point, relative to Australian Height Datum, for use in any groundwater level measurement must be determined to an accuracy of 0.01 metres.

L23 **Provision Of Treated Effluent To Other Persons**
If responsibility of the treated effluent is given or transferred to another person, the requirements of the *Water Supply (Safety and Reliability) Act 2008* must be met.

L24 The disposal of treated effluent to land must be carried out in a manner that is consistent with the *National Water Quality Management Strategy - Guidelines for Sewerage Systems - Use of Reclaimed Water*, November 2000 (Agriculture and Resource Management Council of Australia and New Zealand, Australia and New Zealand Environment and Conservation Council and National Health and Medical Research Council).

Agency Interest: Noise

N1 **Noise Nuisance.**
Noise from the ERA must not cause an environmental nuisance at any nuisance sensitive place or commercial place

N2 **Noise Monitoring.**
When requested by the administering authority, noise monitoring must be undertaken to investigate any complaint of noise nuisance, and the results notified within 14 days to the administering authority. Monitoring must include:

(a) $L_{A\ Max\ adj,\ T}$
(b) Background Noise
(c) the level and frequency of occurrence of impulsive or tonal noise;
(d) atmospheric conditions including wind speed and direction;
(e) effects due to extraneous factors such as traffic noise; and
(f) location, date and time of recording.

N3 The method of measurement and reporting of noise levels must comply with the latest edition of the Environmental Protection Agency's Noise Measurement Manual.

Agency Interest: Waste

Ws1 **Waste Handling**
All regulated waste (for example, sewage tank sludges) removed from the site must be removed by a person that holds a current approval to transport such waste in accordance with the provisions of the *Environmental Protection Act 1994*.

Ws2 **Off-site movement of waste**
Where regulted waste is removed from the site (other than by a release as permitted under another condition of this development approval), the registered operator must monitor and keep records of the following:
(a) The date, quantity and type of waste removed; and
(b) The name of the waste transporter and/or disposal operator that removed the waste; and
(c) The intended treatment, disposal, and destination of the waste.

Agency Interest: Water

W1 The only contaminants permitted to be released directly or indirectly to waters under this approval is treated sewage wastewater from Port Hinchinbrook during wet weather conditions and in compliance with the conditions of this approval.

Table 4 Contaminant release to waters

Discharge location		Release limit				
Monitoring point	Discharge location	Quality characteristics	Minimum	50th Percentile	Maximum	Monitoring frequency

Outlet from wet weather storage tanks	One Mile Creek at a point about 50 metres upstream of the road culvert under the Bruce Highway adjacent to Lot 2 CWL1212	Suspended Solids			5 mg/L	At least once during a discharge, then weekly thereafter during a discharge.
		5 Day - Biological Oxygen Demand			10 mg/L	
		Total Nitrogen		5 mg/L	10 mg/L	
		Total Phosphorous		1 mg/L	2 mg/L	
		Faecal Coliform		10 Colony forming units per 100ml	100 Colony forming units per 100ml	
		pH	6.5 pH units		8.5 pH units	
		Dissolved Oxygen	2 mg/L			

W2 **Releases to One Mile Creek**
Contaminants must only be released to One Mile Creek from the outlet from wet weather storage tanks on Lot 1 C1043 at the discharge location and release limits stated in **Table 4 Contaminant release to waters.**

W3 Contaminants must not be released to One Mile Creek on any dry weather day.

W4 Contaminants must only be released to One Mile Creek after wet weather storage has reached capacity due to wet weather conditions preventing irrigation.

W5 The total quantity of contaminants released to One Mile Creek via the discharge location described in condition W2 must not exceed 375 cubic metres on any day.

W6 Contaminants must only be released to One Mile Creek when the flow rate within One Mile Creek is sufficient to ensure a minimum dilution factor of 10 to 1 (10 parts One Mile Creek flow to 1 part treated sewage wastewater) is achieved and the creek flow overspills the weir located between One Mile Creek and the Grande Canal.

W7 **Outfall pipe to be submerged**
The discharge location to One Mile Creek must be submerged such that the top of the outfall pipe is at least 0.5 metres under water at all times during discharge.

W8 **One Mile Creek flow measurement**
A flow measurement device to measure creek water flows must be located on One Mile Creek for the purpose of determining when release can occur in accordance with condition W6, and records kept of such determinations.

W9 Within 3 months of the date this approval takes effect, provide a report to the Environmental Protection Agency about how flow rate within One Mile Creek is to be measured as required by condition W8 (for example, by determining levels at the weir in One Mile Creek that relate to stream flows).

W10 **Release quantity measurement**
The daily volume of contaminants released to waters must be determined or estimated by an appropriate method, for example a flow meter, and records kept of such determinations and estimates.

W11 **Monitoring**
Monitoring must be undertaken and records kept of contaminant releases to waters from the discharge location for the quality characteristics and not less frequently than specified in **Table 4 -**

Contaminant release to waters. All determinations of the quality of contaminants released must be:
(a) made in accordance with methods prescribed in the latest edition of the Environmental Protection Agency Water Quality Sampling Manual; and
(b) carried out on samples that are representative of the discharge.

W12 **Sewage Pump Stations**
Pump stations must be fitted with stand-by pumps and pump-failure alarms as well as high level alarms to warn of imminent pump station overflow. All alarms must be able to operate without mains power.

W13 An updated list of all pump stations connected to the sewage treatment plant must be maintained. This list must contain at least the following information:
(a) pump station identification, e.g., pump station number by which the pump station is uniquely identified;
(b) address/location of the pump station including name of street and suburb in which the pump station is located and some means of identifying the location of the pump station, e.g., GPS coordinates and/or an up to date, accurate and appropriately scaled map.

W14 Where pump station locations change over time, an updated list of the information required by condition W12 must be provided to the administering authority with the following annual return.

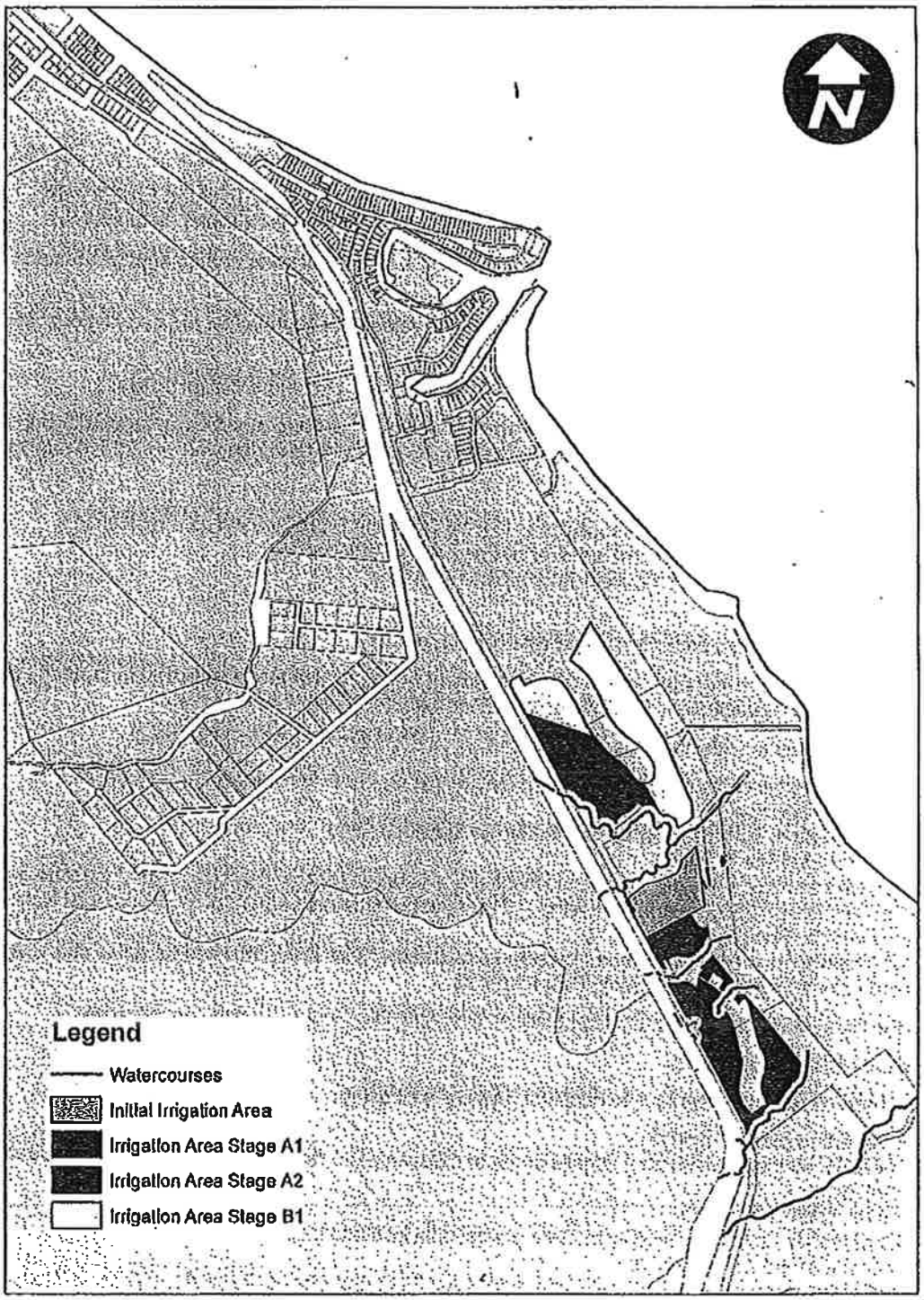
W15 **Sewer Infiltration**
All reasonable and practicable measures must be implemented to prevent or minimise sewer infiltration.

W16 For the purposes of demonstrating compliance with condition W14, the following matters must be reported to the administering authority at the time of the next annual return, and then every 2 years with an annual return thereafter;
(a) the estimated level of infiltration;
(b) the reasonable and practicable measures intended to be implemented to minimise infiltration;
(c) the actions taken to minimise infiltration; and
(d) periodic re-estimations of the level of infiltration and, by comparison with previous infiltration estimates and connected population, an assessment of the effectiveness of the actions taken to minimise infiltration.

Agency Interest: Social

S1 **Complaint Response.**
The operator of the ERA must record the following details for all complaints received and provide this information to the administering authority on request:
(a) Time, date, name and contact details of the complainant;
(b) reasons for the complaint;
(c) any investigations undertaken;
(d) conclusions formed; and
(e) any actions taken.

Figure 1 – Port Hinchinbrook Effluent Irrigation System Schematic



DEFINITIONS

Words and phrases used throughout this permit[1] are defined below. Where a definition for a term used in this permit[1] is sought and the term is not defined within this permit[1] the definitions provided in the relevant legislation shall be used.

"administering authority" means the Environmental Protection Agency or its successor.

"annual return" means the return required by the annual notice (under section 316 of the *Environment Protection Act 1994*) for the section 73F registration certificate that applies to the development approval.

"approval" means 'notice of development application decision' or 'notice of concurrence agency response' under the *Integrated Planning Act 1997*.

"authorised place" means the place authorised under this development approval for the carrying out of the specified environmentally relevant activities.

"commercial place" means a place used as an office or for business or commercial purposes.

"dry weather day" refers to a day during which no rainfall is recorded at the nearest Commonwealth Bureau of Meteorology nearest to the sewage treatment plant. The term excludes days during which recorded rainfall over the three predecing days exceeds 100 mm.

"dwelling" means any of the following structures or vehicles that is principally used as a residence –

- a house, unit, motel, nursing home or other building or part of a building;
- a caravan, mobile home or other vehicle or structure on land;
- a water craft in a marina.

"equivalent person" means a proportional flow rate of 250L per day.

"Environmental Protection Agency" means the department or agency (whatever called) administering the *Coastal Protection and Management Act 1995* or the *Environmental Protection Act 1994*.

"Grande Canal" means the tidal waters of Port Hinchinbrook downstream of One Mile Creek.

"intrusive noise" means noise that, because of its frequency, duration, level, tonal characteristics, impulsiveness or vibration –

- is clearly audible to, or can be felt by, an individual; and
- annoys the individual.

In determining whether a noise annoys an individual and is unreasonably intrusive, regard must be given to Australian Standard 1055.2 – 1997 Acoustics – Description and Measurement of Environmental Noise Part 2 – Application to Specific Situations.

"$L_{A,\ max\ adj,\ T}$" means the average maximum A-weighted sound pressure level, adjusted for noise character and measured over any 10 minute period, using Fast response.

"land" in the "land schedule" of this document means land excluding waters and the atmosphere.

"mg/L" means milligrams per litre.

"noxious" means harmful or injurious to health or physical well being.

"nuisance sensitive place" includes –

- a dwelling, residential allotment, mobile home or caravan park, residential marina or other residential premises; or
- a motel, hotel or hostel; or
- a kindergarten, school, university or other educational institution; or
- a medical centre or hospital; or
- a protected area under the *Nature Conservation Act 1992*, the *Marine Parks Act 1992* or a World Heritage Area; or
- a public thoroughfare, park or gardens; or
- a place used as a workplace, an office or for business or commercial purposes and includes a place within the curtilage of such a place reasonably used by persons at that place.

"offensive" means causing offence or displeasure; is disagreeable to the sense; disgusting, nauseous or repulsive.

"protected area" means –

- a protected area under the *Nature Conservation Act 1992*; or
- a marine park under the *Marine Parks Act 1992*; or
- a World Heritage Area.

"regulated waste" means non-domestic waste mentioned in Schedule 7 of the *Environmental Protection Regulation 1998* (whether or not it has been treated or immobilised), and includes -

- for an element - any chemical compound containing the element; and
- anything that has contained the waste.

"site" means land or tidal waters on or in which it is proposed to carry out the development approved under this development approval.

"watercourse" means a river, creek or stream in which water flows permanently or intermittently-

- in a natural channel, whether artificially improved or not; or
- in an artificial channel that has changed the course of the watercourse.

"waters" includes river, stream, lake, lagoon, pond, swamp, wetland, unconfined surface water, unconfined water natural or artificial watercourse, bed and bank of any waters, dams, non-tidal or tidal waters (including the sea), stormwater channel, stormwater drain, roadside gutter, stormwater run-off, and groundwater and any part-thereof.

"works" or "operation" means the development approved under this development approval.

END OF CONDITIONS