Development Permit

Section 378 Sustainable Planning Act 2009

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DERM Permit¹ number: IPDE01379509

This document replaces the document issued on 11 December 2009

tal licences and permits

DERM Permit ¹ number:	IPDE01379509		
Assessment Manager reference:	as above		
Date application received by DERM:	N/A		
Permit ¹ Type:	Development Approval for a MCU involving an ERA		
Date of Decision:	2 July 2010		
Decision:	Change of Conditions		
Relevant Laws and Policies:	Environmental Protection Act 1994 and any subordinate legislation		

Development Description

Property	Lot/Plan	Aspect of Development		
Bruce Highway, Cardwell	Lot 170 SP177389			
	Lot 58 SP116825			
	Lot 98 SP221610			
	Lot 54 SP115194	· · ·		
	Lot 82 SP177389			
	Lot 81 on SP202762	ERA 16 Extractive and screening activities Threshold 1(c) - dredging, in a year, more		
	Lot 24 on SP177389	than 100000t to 1000000t of material		
	State coastal waters adjacent to			
	the above lots, extending to the			
	limits of the area defined as 'the			
	access channel' as shown on			
	Attachment 2			

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Department of Environment and Resource Management www.derm.qld.gov.au ABN 46 640 294 485

¹ Permit includes licences, approvals, permits, authorisations, certificates, sanctions or equivalent/similar as required by legislation administered by the Department of Environment and Resource Management and the Queensland Parks and Wildlife Service

Additional comments or advice about the application

This notice is issued pursuant to section 378 of the *Sustainable Planning Act 2009* as a result of a determination by the Department of Environment and Resource Management that it was necessary to change the conditions of development permit number IPDE01379509 dated 11 December 2009 held by Williams Corporation Pty Ltd ACN 058 737 643 (formerly Cardwell Properties Pty Ltd) for the following reasons:

- On 12 May 2010, a certification statement submitted on behalf of Williams Corporation Pty Ltd indicated that the temporary dredge spoil pond (Stage 1) as constructed did not fully achieve the standard stated in the conditions of development permit number IPDE01379509 (1 x 10⁻⁹ permeability rate);
- The Department of Environment and Resource Management considers that a very high standard of containment and pond construction is necessary to minimise the risk of saline water leaking from the Dredge Spoil Ponds into groundwater;
- After consideration of submissions received from qualified engineers on behalf of Williams Corporation Pty Ltd, the Department of Environment and Resource Management has determined that the permeability standard can be replaced with additional conditions in order to achieve an equivalent level of environmental protection.

By letter dated **2 July 2010**, Williams Corporation Pty Ltd ACN 058 737 643 agreed in writing to the proposed changes in accordance with section 73C(3) of the *Environmental Protection Act 1994*.

Additional information for applicants

This amended permit takes effect on 2 July 2010.

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 Department of Environment and Resource Management.

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*.

Gary Jensen Delegate Department of Environment and Resource Management 2 July 2010

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CONDITIONS OF APPROVAL

Agency Interest: General

A1. Construction of Dredge Spoil Ponds

The Dredge Spoil Ponds identified on the site plan in **Attachment 1** must be constructed to the following standards:

- The pond and bund walls must be constructed using best engineering practice to minimise the permeability of the Dredge Spoil Ponds to the greatest extent possible using the most appropriate earth construction materials on site;
- b) Earthworks shall be carried out in accordance with AS3798;
- c) The earth bund walls of the Dredge Spoil Ponds shall be compacted in layers not exceeding 300mm in thickness to a minimum density ratio of 95% standard in accordance with AS1289;
- d) Field density tests shall be undertaken at a frequency not less than 1 test per 500 square metres distributed reasonably evenly throughout full depth and area.
- A2. If the permeability of any material in the pond and bund walls, when tested in accordance with condition A1, is greater than 1 x 10(-9) m/sec, the registered operator must:
 - (a) immediately notify the Regional Manager -- Coastal, Quarry and Riverine Protection, North Region, DERM in writing (Fx: 4722 5202); and
 - (b) carry out additional groundwater monitoring in accordance with the requirements of condition C7.
- A3. Before the introduction of any dredge spoil into the Dredge Spoil Ponds, the Dredge Spoil Ponds must be inspected and certified by a Registered Professional Engineer of Queensland (or equivalent) as being:
 - (a) constructed in accordance with the above standards; and
 - (b) suitable for their purpose of containing dredge spoil and any associated saline water in such a manner so as to avoid any discharge to groundwater.
- A4. Dredge spoil must be placed in the Dredge Spoil Ponds in such a manner so as to minimise seepage from the Dredge Spoil Ponds to the greatest extent possible including, but not limited to, the initial placement of dredge spoil in an even layer across the base on the Dredge Spoil Ponds.

A5. Dredging

The only form of dredging permitted under this approval is maintenance dredging by way of cutter suction type dredge.

A6. Maintenance dredging under this approval must only be carried out in those areas marked on the site plan in Attachment 2.

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- A7. All dredge spoil must be placed in the Dredge Spoil Ponds identified on the site plan in Attachment 1. To avoid any doubt, this permit does not authorise the placement of dredge spoil in any other ponds on the site (existing or otherwise).
- A8. Any discharge of tailwaters from the Dredge Spoil Ponds must only be released to Discharge Location
 W1 the boat maintenance basin at the location marked as "W1" on the site plan in Attachment 2, and in such a manner so as to avoid any discharge to groundwater.
- A9. Upon completion of any dredge campaign or when either of the temporary dredge spoil ponds are full (whichever occurs first), the registered operator must take action to remove water from the dredge spoil contained within the relevant temporary dredge spoil pond (or both ponds as the case may be) such that the dredge spoil is maintained in an unsaturated state.

A10. Disposal of Dried Dredge Spoil on Land

Dredge spoil may be subsequently removed from the Dredge Spoil Ponds for reuse on or off the site in compliance with the general environmental duty under the *Environmental Protection Act 1994*. Effective procedures must be implemented to ensure that any dredge spoil material from the dredging activities or other excavation at the site is treated, managed and disposed of in a manner:

- (a) which does not cause any land to become contaminated land; and
- (b) is not likely to cause environmental harm due to the mass of and/or concentration of contaminants in such spoil which may cause such environmental harm.

A11. Dredge Management Plan

The registered operator must hold an approved Dredge Management Plan at all times during the life of this approval.

The registered operator must comply with the approved Dredge Management Plan dated 18 November 2009, as amended or renewed from time to time in accordance with the requirements of the *Coastal Protection and Management Act* 1995.

A12. Site-Based Management Plan (Note: A Site-Based Management Plan is included in the approved Dredge Management Plan referred to in condition A11 above)

Before the commencement of any dredging under this approval, the registered operator must prepare and implement a Site-Based Management Plan ("SBMP"). The purpose of the SBMP is to identify all sources of environmental harm including, but not limited to, the actual and potential release of all contaminants, the potential impacts of these sources and what actions will be taken to prevent the likelihood of environmental harm being caused.

The SBMP must address the following matters:

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- (c) Environmental commitments a commitment by senior management to achieve specified and relevant environmental goals;
- (d) Identification of environmental issues and potential impacts;
- (e) Control measures for routine operations to minimise likelihood of environmental harm;
- (f) Contingency plans and emergency procedures for non-routine situations;
- (g) Organisational structure and responsibility;
- (h) Effective communication;
- (i) Monitoring and reporting of contaminant releases;
- (j) Conducting environmental impact assessments;
- (k) Staff training;
- (I) Record keeping; and
- (m) Periodic review of environmental performance and continual improvement.

The development authorised by this approval must be carried out in accordance with the SBMP. Where there is any conflict between the requirements of the SBMP and the conditions of this approval, the conditions of this approval shall preval.

The SBMP must not be implemented or amended in a way that contravenes any condition of this approval.

The registered operator is responsible for the implementation of the SBMP and for ensuring its compliance.

A13. Acid Sulfate Soils

State Planning Policy 2/02: Planning and Managing Development involving Acid Sulfate Soils and State Planning Policy 2/02 Guideline: Planning and Managing Development involving Acid Sulfate Soils must be complied with when treating and managing acid sulfate soils.

- A14. Acid sulfate soils must be managed such that contaminants are not directly or indirectly released to any waters.
- A15. The Dredge Spoil Ponds or any other ponds used for the storage or treatment of acid sulfate soils or other contaminants, must be constructed, installed and maintained:
 - a) so as to prevent any release of contaminants through the bed or banks of the ponds to any waters (including groundwater);
 - b) so that a freeboard of not less than 0.5 metres is maintained at all times; and
 - c) so as to ensure the stability of the ponds' construction.

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A16. Suitable banks and/or diversion drains must be installed and maintained to exclude stormwater runoff from entering the Dredge Spoil Ponds or any other structures used for the storage or treatment of contaminants including acid sulfate soils or wastes.

A17. Monitoring

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

A18. 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.

A19. 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.

A20. 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.

A21. Records

Record, compile and keep all monitoring results required by this approval and present this information to the administering authority when requested.

A22. All records required by this approval must be kept for 5 years.

A23. Notification

Telephone DERM's Pollution Hotline or local office as soon as practicable after becoming aware of any release of contaminants not in accordance with the conditions of this approval.

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Agency Interest: Air

B1. Dust Nuisance

The release of dust and/or particulate matter resulting from the ERA must not cause an environmental nuisance at any nuisance sensitive or commercial place.

B2. Dust and particulate matter must not exceed a dust deposition of 120 milligrams per square metre per day, when monitored in accordance with Australian Standard AS 3580.10.1 of 2003 (or more recent editions), when measured at any nuisance sensitive or commercial place.

B3. 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.

- B4. When requested by the administering authority, dust and particulate monitoring must be undertaken to investigate any complaint of environmental nuisance caused by dust and/or particulate matter, and the results notified within 14 days to the administering authority following completion of monitoring. Monitoring must be carried out at a place(s) relevant to the potentially affected dust sensitive place and at upwind control sites and must include:
 - a) for a complaint alleging dust nuisance, dust deposition; and
 - b) for a complaint alleging adverse health effects caused by dust, the concentration per cubic metre of particulate matter with an aerodynamic diameter of less than 10 micrometre (µm) (PM10) suspended in the atmosphere over a 24hr averaging time.

Agency Interest: Water

C1. The only contaminants permitted to be released from the site are treated dredge spoil tailwaters from the Dredge Spoil Ponds in compliance with the release limits listed in Table 1 – Contaminant release limits to water.

C2. Discharge Location W1

Contaminants must only be released to surface waters at Discharge Location W1 – the boat maintenance basin – marked as "W1" on the site plan in Attachment 2.

C3. Monitoring

Monitoring of the quality characteristics identified in Table 1 – Contaminant release limits to water must be undertaken at the specified monitoring point on each day that a contaminant release occurs at the discharge location. Records must be kept of all monitoring results.

All determinations of the quality of contaminants released must be:

a) made in accordance with methods prescribed in the latest edition of the Department of Environment and Resource Management's Monitoring and Sampling Manual; and

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b) carried out on samples that are representative of the discharge.

Monitoring Discharge	Quality	Release limit		Monitoring frequency	
point	location	characteristics	Minimum	Maximum	monitoring froqueity
Outlet of dredge spoil ponds	W1 - Boat maintenance basin	NTU (Nephelometric Turbidity Units)	N/A	50	On each day that a release occurs
Outlet of dredge spoll ponds	W1 - Boat maintenance basin	pН	6.0	9.0	On each day that a release occurs

Table 1 - Contaminant release limits to water

C4. Groundwater

Dredge material, including treated dredge waters, contaminants or wastes must not be released directly or indirectly to groundwaters.

- C5. By 30 November 2009, the registered operator must design and implement an ongoing Groundwater Monitoring Program to assess, at intervals of not less than once every two months, whether there has been any statistically significant change compared to background values at locations hydraulically down gradient of the Dredge Spoil Ponds for at least the following characteristics:
 - a) salinity measured as electrical conductivity; and
 - b) pH.

C6. The Groundwater Monitoring Program must:

- a) be designed and installed 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 carried out by a competent person with appropriate training; and
- c) provide for the following:
 - monitoring bores to be located hydraulically down gradient from the Dredge Spoil Ponds;
 - representative groundwater sampling from "background bore(s)" that are hydraulically up-gradient of the Dredge Spoil Ponds and are representative of the aquifer in which the Dredge Spoil Ponds are located;
 - iii. monitoring and measurement of the quality of groundwater hydraulically down gradient of the Dredge Spoil Ponds;
 - iv. the locations for groundwater monitoring facilities to be recorded with reference to horizontal coordinates accurate to 1.0 metre;
 - v. that on any occasion groundwater samples are obtained, measurement and recording of standing groundwater levels in metres accurate to 0.01 metre is undertaken.

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C7. Where additional groundwater monitoring is required pursuant to condition A2, the registered operator must install a suitable array of not less than five (5) evenly spaced early detection groundwater monitoring bores along the western shoulder of the crest of the eastern embankment of the Dredge Spoil Ponds, to detect the presence of any saline seepage from the Dredge Spoil Ponds.

The bores must be monitored on a daily basis and records kept of all monitoring results. The monitoring results must be provided to DERM on a weekly basis.

If the salinity measured in any bore exceeds 10% of the salinity of the tailwaters in the Dredge Spoil Ponds, placement of dredge spoil into the Dredge Spoil Ponds must immediately be ceased and the Dredge Spoil Ponds drained to an unsaturated state.

The additional monitoring required by this condition C7 must continue until sampling results no longer indicate the presence of saline seepage and DERM agrees in writing.

C8. All groundwater sampling and monitoring bores must be:

- a) maintained in an operative condition;
- b) reasonably accessible at all times to any authorised person; and
- c) fitted with a locked cap.
- **C9.** Stormwater that has been in contact with any contaminants in the Dredge Spoil Ponds must only be released:
 - at Discharge Location W1 the boat maintenance basin marked as "W1" on the site plan in Attachment 2; and
 - in compliance with the release limits specified in Table 1 Contaminant release limits to water, for each quality characteristic.

Agency Interest: Noise

D1. Noise Nuisance

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

D2. 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:

- LA 10, adj, 10 mins;

- LA 1, adj, 10 mins;
- LA 90, adj, 10mins;
- the level and frequency of occurrence of impulsive or tonal noise;
- atmospheric conditions including wind speed and direction;
- effects due to extraneous factors such as traffic noise; and
- location, date and time of recording.
- D3. The method of measurement and reporting of noise levels for the purposes of condition D2 must comply with the latest edition of the Department of Environment and Resource Management's Noise Measurement Manual.
- D4. All reasonable and practical measures must be implemented to minimise the generation of noise from the dredging activities.
- D5. Dredging activities must only be carried out between the hours of 7:00am to 6:00pm Monday to Saturday, not including any public holiday. Mobilisation of dredging-related equipment may be carried out between the hours of 6:30am to 6:00pm Monday to Saturday, not including any public holidays.

Agency Interest: Social

E1. Complaint Response

The registered operator 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.

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ATTACHMENT 1 – Drawing No. 7902/31/01-101 Revision 1, dated 28/08/2009, showing the Dredge Spoil Ponds

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ATTACHMENT 2 – Plan showing the location of permitted dredging areas within the Port Hinchinbrook waterways and the access channel and Discharge Location W1 – the boat maintenance basin

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DEFINITIONS

Words and phrases used throughout this permit¹ are defined below. Where a definition for a term used in this permit¹ is sought and the term is not defined within this permit¹ the definitions provided in the relevant legislation shall be used.

"administering authority" means the Department of Environment and Resource Management or its successor.

"approval" means this development permit issued under the *Integrated Planning Act* 1997 and amended pursuant to section 3.5.33 of the *Integrated Planning Act* 1997.

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

"Discharge Location W1 – the boat maintenance basin" means the location marked as W1 on the site plan in Attachment 2, more particularly described as E 0399005, N 7977790.

"dredge spoil" means material taken from the bed or banks of waters by using dredging equipment or other equipment designed for use in extraction of earthen material.

"Dredge Spoil Ponds" means the temporary dredge spoil pond (Stage 1) and the temporary dredge spoil pond (Stage 2) identified on the site plan in Attachment 1 to this approval.

"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.

"Department of Environment and Resource Management" means the department or agency (whatever called) administering the Coastal Protection and Management Act 1995 or the Environmental Protection Act 1994.

"LA 10, adj, 10 mins" means the A-weighted sound pressure level, (adjusted for tonal character and impulsiveness of the sound) exceeded for 10% of any 10 minute measurement period, using Fast response.

"LA 1, adj, 10 mins" means the A-weighted sound pressure level, (adjusted for tonal character and impulsiveness of the sound) exceeded for 1% of any 10 minute measurement period, using Fast response.

"LA 90, adj, 10 mins" means the A-weighted sound pressure level, (adjusted for tonal character and impulsiveness of the sound) exceeded for 90% of any 10 minute measurement period, using Fast response.

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

"NTU" means nephelometric turbidity units.

"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 Marin e 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.

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

"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

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sea), stormwater channel, stormwater drain, roadside gutter, stormwater run-off, and groundwater and any partthereof.

"works" or "operation" means the development authorised by this approval.

END OF CONDITIONS

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