Australian Government

Department of Sustainability, Environment, Water, Population and Communities

Approval

Australia Pacific LNG Project - Development of a LNG Plant and Ancillary Onshore and Marine Facilities on Curtis Island - EPBC 2009/4977

This decision is made under sections 130(1) and 133 of the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act).

person to whom the approval is granted	Australia Pacific LNG Pty Limited
proponent's ABN	ABN: 68 001 646 331
proposed action	The development, construction, operation and decommissioning of a multi-train liquefied natural gas (LNG) processing plant (LNG Facility) and associated ancillary onshore and marine facilities within the Curtis Island Industry Precinct of the Gladstone State Development Area, in the south-west section of Curtis Island adjacent to Gladstone: • as described in the proponent's referral received under the EPBC Act on 6 July 2009; and • as described in the proponent's Environmental Impact Statement and supplementary information provided pursuant to section 35(2) of the QLD SDPWO Act.
decision	To approve the proposed action for each of the following controlling provisions: • World Heritage properties (sections 12 and 15A, EPBC Act) • National Heritage Places (sections 15B and 15C, EPBC Act) • Listed threatened species and communities (sections 18 and 18A, EPBC Act) • Listed migratory species (sections 20 and 20A, EPBC Act)
conditions of approval	This approval is subject to the conditions specified below.
expiry date of approval	This approval has effect until 22 February 2061.
name and position	The Hon Tony Burke MP Minister for Sustainability, Environment, Water, Population and Communities
signature	Tony Burke
date of decision	21. 2. 11

Conditions

LNG plant and ancillary onshore and marine facilities site

1. The LNG plant and ancillary onshore and marine facilities site is substantially in accordance with the area outlined on the map at Figure 1.

2. Dredging is to be limited to a maximum of 900,000m^3 for the construction dock on Curtis Island.

Visual impact of construction and operation

3. The proponent must minimise the visual impact of the construction and operation of the LNG Facility by:

   (a) constructing the LNG plant and ancillary onshore and marine facilities within the site identified in Figure 1;

   (b) applying a colour scheme to the LNG facility and buildings, other than the LNG storage tanks and any necessary corrosion-protected structures and pipe insulation, from the palette of predominant colours found in the locality (Curtis Island) except where to do so would be in contravention of health and safety legislative requirements;

   (c) ensuring site works minimise tree (including mangrove) clearing, with stabilisation and rehabilitation works on disturbed areas fully implemented within twelve months of completing each component of the LNG Facility (the worker accommodation facility and associated infrastructure; LNG storage tanks; and LNG trains and ancillary equipment and infrastructure, including marine loading and offloading facilities); and

   (d) minimising light spill and direct views of lights outside the LNG facility boundary except where to do so would be in contravention of health and safety legislative requirements.

Conduct of construction and operation workforce

4. The proponent must not bring private motor vehicles onto the LNG site, or private watercraft into waters within 100 metres of the LNG site boundary, except for activities directly relating to pre-clearance surveys, site clearance, and the construction and operation of the LNG plant and ancillary onshore and marine facilities.

5. The proponent must not bring animals and plants (including domestic cats and dogs and other potential pests and weeds), other than for landscaping and rehabilitation purposes onto the LNG plant and ancillary onshore and marine facilities site, or onto Curtis Island.

   Note: For clarity, plants that are brought to Curtis Island for landscaping and rehabilitation purposes must be native Australian species sourced from the South Eastern Queensland and/or Brigalow Belt bioregion/s)

6. Entry into the Curtis Island Environmental Management Precinct, as identified in Figure 2, must be prohibited for all the proponent's construction workers, construction contractors,and its employees, whilst they are rostered on shifts or accommodated by the proponent on Curtis Island, except with the prior consent in writing of the authority responsible for the management of this Precinct.

7. An induction program must be implemented for all the proponent's employees and sub-contractors at the time or before they commence work on Curtis Island. The induction program must include:

   (a) an overview that clearly explains to all the proponent's employees and sub-contractors engaged on the construction and operation of the LNG Facility that they are working in a World Heritage Area and an explanation of the environmental values of the World Heritage Area;

   (b) information on listed species and ecological communities and other native species that are found in the area, and the related responsibilities of the proponent, its employees and subcontractors;

   (c) an explanation of the Rodds Bay Dugong Protection Area, and Great Barrier Reef Marine Park zoning on the eastern side of Curtis Island, Rodds Peninsula and the Capricorn Bunker group, and the responsibilities of the proponent, its employees and subcontractors within and in relation to these areas. This explanation must include the provision of maps depicting the zones, an explanation as to what can and cannot be done in the various zones, and information about how important the terrestrial and marine environments of the Capricorn Bunker group are to conserving biodiversity within the Great Barrier Reef Marine Park; and

   (d) information that has the objective of fostering a culture of environmental awareness of the values of the area and also raises awareness among all employees and sub-contractors of the compliance and enforcement programs of the Great Barrier Reef Marine Park Authority and penalties that apply for offences.

8. The obligations under conditions 4, 5, 6 and 7 must also apply to any visitors to the LNG site, or to Curtis Island, who are under the direction or control of the proponent.

9. Within 20 business days of the final investment decision to proceed with the proposed action, the proponent must submit to the Minister for approval:

   (a) a Curtis Island Environment Protection Code of Conduct for the construction workforce while on site and while travelling to and from the mainland and the construction site; and

   (b) a code of conduct implementation strategy for enforcing compliance with the Curtis Island Environment Protection Code of Conduct.

10. The code of conduct shall include, but not necessarily be limited to, the requirements set out in conditions 4, 5, 6 and 7.

11. The approved Curtis Island Environment Protection Code of Conduct must be implemented.

12. At least 60 business days before the commissioning of the first LNG train, the proponent must review, and if necessary revise, the Curtis Island Environment Protection Code of Conduct and implementation strategy and provide the Minister with evidence that this review has been carried out. If the Curtis Island Environment Protection Code of Conduct and/or implementation strategy are revised, the revised document or documents must be submitted to the Minister for approval within 20 business days of the review being finalised. Once the Minister has approved in writing the revised code of conduct and/or implementation strategy, the approved code of conduct and/or implementation strategy must be implemented.

Offsets

Plan to secure and manage environmental offsets

13. An Environmental Offsets Plan to offset the loss of habitat and associated World Heritage and National Heritage values caused by the construction and operation of the LNG facility, must be developed.

14. The Plan must address, but not necessarily be limited to, impacts on vegetation, biodiversity and landscape aesthetics arising from:

    (a) the development and operation of the LNG facility;

    (b) other activities on Curtis Island that are associated with the LNG Facility (including workers' accommodation facilities, port works for the project, and ancillary works); and

    (c) increased risks to biodiversity values of the World Heritage and National Heritage property arising from increased shipping movements and other subsequent or indirect impacts beyond the immediate development site such as water quality impacts and increased recreational access arising from the development and operation of the LNG facility.

15. The Plan must detail:

    (a) the principles adopted in the Plan. These principles must reflect the objective of identifying, protecting, conserving, presenting, transmitting to future generations and, if necessary, rehabilitating, the World Heritage and National Heritage values of the Great Barrier Reef property;

    (b) the predicted total loss (in extent and type) of areas of ecological and aesthetic value, (including remnant vegetation, high value regrowth, significant conservation species, habitat, biodiversity corridors, scenic vistas of outstanding natural beauty);

    (c) the methodology for identifying the requirements for environmental offsets for specific components of the LNG Facility over the life of the project;

    (d) a proposed timeline for implementing the Environmental Offsets Plan;

    (e) relevance to any Commonwealth or State government requirements for offsets;

    (f) in relation to any land retained at the time of preparation of the Plan, the location, size and environmental values of the offsets (land);

    (g) in relation to any land retained at the time of preparation of the Plan, the management measures, including funding, required to secure, maintain and enhance the values of the proposed offset (land); and

    (h) a system for reporting to the Minister on offset arrangements, their management and how offset values are being maintained.

16. The Environmental Offsets Plan must as a minimum include:

    (a) to offset direct impacts, the securing by the proponent of an offset property:

(i) that contains attributes or characteristics at least corresponding with those of the LNG facility site; and

(ii) at a ratio of no less than 5:1 of the LNG facility site area, excluding the proposed reclamation area (that is, a property of at least 1,153 ha in total area);

(b) a commitment by the proponent to use its best endeavours to secure National Park status for the offset property. At a minimum the proponent must ensure the retention and management for conservation purposes, under a secure permanent land tenure arrangement, of the offset property.

(c) to offset indirect impacts, a strategy for contributions to field management and visitor awareness of the Great Barrier Reef World Heritage Area. The strategy must:

(i) provide for activities to support field management to address the increased pressures on the Great Barrier Reef World Heritage Area, including but not limited to, pressures on populations of vulnerable species, increased risks from shipping and increased use of the Area;

(ii) be developed in consultation with the Great Barrier Reef Marine Park Authority, to give priority to objectives for the protection of the Great Barrier Reef Marine Park and World Heritage Area identified (from time to time), which may include (without limitation) patrols, support for incident response planning and preparedness, data collection, and assistance in visitor management;

(iii) provide for the submission of periodic reports to the Great Barrier Reef Marine Park Authority on the activities conducted;

(iv) provide for a budget of at least $200,000 per annum for the life of the project (indexed at CPI) and in addition $100,000 per annum (indexed at CPI) for each operating LNG Train (commencing on commissioning of the relevant Train) to support implementation of the strategy.

Note: For clarity, contributions or offsets negotiated with the Queensland Government with respect to the LNG Facility site (e.g. including under the Environmental Management Precinct Agreement) may, in whole or in part, meet the requirements of condition 16(a).

17. Subject to condition 18, any property that is purchased or otherwise retained under a secure land tenure arrangement for the purposes of the Environmental Offsets Plan must be located within the Great Barrier Reef World Heritage Area, preferably on Curtis island or nearby.

18. If, within the Great Barrier Reef World Heritage Area, no area of land containing attributes or characteristics at least corresponding with those of the LNG facility site can be secured and protected in the manner described in condition 16 within 24 months of the Minister's approval of this project, an alternative proposal and timetable for acquiring (by purchase, lease or otherwise) property other than in the GBRWHA must be provided to the Minister for approval in writing.

19. To avoid doubt, the offset required under condition 16 is additional to any similar offset required under an EPBC Act condition of approval for another proponent for an LNG facility on Curtis Island.

Environmental Offsets Plan

20. Within 6 months of the final investment decision to proceed with the proposed action, the Environmental Offsets Plan must be submitted in writing for the approval of the Minister. The approved plan must be implemented.

    Note: To avoid doubt, The Environmental Offsets Plan, or components of it, may be prepared and implemented in consultation with the Gladstone Ports Corporation or other bodies.

Construction and operation environmental management requirements and plans

21. At least one week before the commencement of clearance of native vegetation associated with the construction and operation of the LNG plant, the proponent must undertake pre-clearance surveys to check for the presence of listed ecological communities, listed threatened species, listed migratory species, their habitat, and species identified as contributing to the World Heritage and National Heritage values of the Great Barrier Reef World Heritage Area.

22. Pre-clearance surveys must:

    (a) be undertaken consistent with the Department's survey guidelines in effect at the time of the survey. This information can be obtained from http://www.environment.gov.au/epbc/guidelines-policies.html#threatened;

    (b) take account and reference previous ecological surveys undertaken by the proponent for the area and relevant new information on likely presence of MNES;

    (c) be undertaken by a suitably qualified ecologist approved in writing by the Department;

    (d) document the survey methodology, targeted species and ecological communities, results and significant findings in relation to MNES; and

    (e) apply best practice site assessment and ecological survey methods appropriate for each listed threatened species, listed migratory species, their habitat, and listed ecological communities. Pre-clearance survey reports (which document the methods used and the results obtained) must be published by the proponent on the internet before commencement and provided to the Department on request.

23. If a listed threatened species or migratory species or their habitat, is found during the pre-clearance surveys undertaken as required by condition 21, and is not specified in conditions 48-57 inclusive, the proponent must submit a separate management plan for each such species, ecological community or other MNES, to manage the impacts of construction and operation of the LNG facility. Each such plan must be submitted before the commencement of construction of the LNG facility. Each plan must include:

    (a) a map of the location of species or species habitat in relation to the LNG Facility and its associated infrastructure;

    (b) a description of the measures that will be employed to avoid impact on the species or species habitat

(c) where impacts are unavoidable, and if an impacted species is not specified in conditions 48-57 inclusive, propose offsets to compensate for the impact on the population or impact on the species habitat

24. Before commencement the proponent must prepare a Construction Environmental Management Plan (CEMP). The CEMP may be submitted in stages (Staged CEMP) in which case commencement of a stage covered by the staged CEMP cannot commence until submitted and approved by the Minister.

25. The CEMP must address, but not necessarily be limited to, an identification of all activities with potential to adversely impact on MNES proposed to be undertaken during the construction of LNG facilities, including the construction camp and supporting facilities and the marine facilities on Curtis Island. The CEMP must include:

(a) design plans showing the type and extent of the works proposed;

(b) a construction schedule and methodology, including plans and maps showing discharge points and emission controls for all construction stages;

(c) an environmental monitoring and a sampling program which details baseline data collection and provides the basis for ongoing monitoring of specified parameters for the construction and operational phases, including appropriate triggers for mitigation and cessation of works, including pile driving, and reporting mechanisms that ensure reporting to the Minister within one business day of injury to, or mortality of, an individual or individuals of EPBC listed threatened or migratory species caused by construction activities;

(d) any potential impacts or effects of the proposed works on the environment during the construction phase and the means by which adverse impacts will be avoided or mitigated; including measures to minimise light emission onto the water from the loading jetty and construction docks during construction;

(e) details of the sewage treatment plant and desalination plant, including:

(i) design and operational performance information for sewage treatment and desalination (including acoustic performance of pumps and other machinery);

(ii) design and operational performance information for any outfalls and diffusers for emissions, including liquid and solid emissions into Port Curtis including detailed analysis of existing water quality, effluent contaminants, acute and chronic toxic effects of contaminants on fauna and flora and any long term ecological effects from outfalls and emissions;

(iii) a detailed description of impacts from the discharge of treated sewage and brine. Source water quality data and characteristics of additives must be provided, and the disposal methods to be used must be described in the plan. The information must be used to determine the site specific mitigation measures proposed, including monitoring and reporting regimes;

(iv) information on the eco-toxicity of effluent at the point of release, in the mixing zone, and cumulative impacts of contaminants in the marine ecosystem over time;

(v) the assumptions, adequacy and limitations of any modelling used to predict the dimensions and duration of the mixing zone.

(f) details on any other plant, equipment or activities that involve emissions to the environment, including:

(i) a description of the plant, equipment or activities;

(ii) design and operational performance information for plant, equipment or activities; and

(iii) the potential for unforseen or accidental incidents and proposed responses to these incidents.

(g) a detailed list of waste streams including their handling, treatment and disposal arrangements;

(h) the environmental protection commitments proposed for the activities (including all associated accommodation and recreation activities on the Island) to protect the environmental values under best practice environmental management;

(i) a rehabilitation program for land proposed to be disturbed during construction of all infrastructure (including associated accommodation and recreation activities) on Curtis Island;

(j) details of a response plan, with appropriate triggers, which will be initiated in response to any significant impacts on the environment from the works.

(k) identification and characterisation of all wastes and emissions produced by the LNG Facility and its associated support infrastructure including its source, handling, treatment, disposal or release to the environment.

26. The CEMP, or a stage of the CEMP, must be submitted for the approval of the Minister. Commencement of the action to which the staged CEMP relates must not occur without the approval in writing of the Minister of the CEMP. The approved plan must be implemented.

27. Before the commissioning of the first LNG train, an Operational Environmental Management Plan (OEMP) must be prepared.

28. The OEMP must address the matters required to be included in the CEMP while incorporating changes and any additions the proponent believes are necessary to reflect the shift from the construction phase to the operational phase.

29. The OEMP must be submitted for the approval of the Minister. Commissioning of the first LNG train must not occur without the approval in writing of the Minister. The approved plan must be implemented.

Note: To avoid doubt, if a condition of another approval held by the proponent requires a Construction Environmental Management Plan and/or Operational Environmental Management Plan, the proponent may simultaneously meet the relevant requirements of both conditions by submitting a single plan.

Discharge of sewage effluent

30. Any discharge of treated sewage effluent into the waters surrounding Curtis Island must, at minimum, meet the definition of tertiary treatment as specified in section 135(3) of the *Great Barrier Reef Marine Park Regulations 1983* and be in accord with GBRMPA *Sewage*

Discharge Policy March 2005, unless studies required to develop the CEMP under conditions 24 and 25 indicate that more stringent pollutant limits are necessary.

Dredging Management Plan – Construction Dock

31. For the construction dock, the proponent must submit to the Minister a Dredging Management Plan which must include

    (a) mapping of significant and sensitive receptors in the area of the marine facilities, with linkages to applicable monitoring programs;

    (b) assessment of all potential and real environmental risks to matters protected by the EPBC Act from dredging activities;

    (c) appropriate measures (for example mitigation measures, performance indicators/trigger levels and corrective actions/management actions) that will ensure that there are no unacceptable impacts on the Great Barrier Reef World Heritage Area, Great Barrier Reef National Heritage Place, EPBC listed threatened or migratory species. These must include:

        i. operating procedures to minimise injury to, or mortality of, EPBC Act listed threatened or migratory species from dredging activities or construction activities;

        ii. reporting mechanisms that ensure reporting to the Minister within one business day of the proponent becoming aware of injury to, or mortality of, an EPBC listed threatened or migratory species caused by dredging activities;

        iii. management triggers, based on results obtained from the Water Quality Monitoring Program, including a reporting requirement to advise the Department in writing within one working day when triggers are exceeded;

        iv. contingency measures, based upon results of water quality and applicable research and monitoring programs, when dredging operations must be varied or suspended;

        v. measures that minimise the risk of introduced marine pest species, including ballast-water management and vessel inspections for any non-domestic vessels; and

        vi. responsive actions that will be undertaken in the event contingency measures are employed, including reporting to the Minister.

    (d) details of dredge spoil placement; and

    (e) provisions to sample and analyse dredge spoil composition.

32. The Dredging Management Plan must be submitted for the approval of the Minister. Commencement of dredging must not occur without approval. The approved plan must be implemented.

33. A dredge management plan satisfying State requirements and addressing the matters identified in this condition will be deemed to have been submitted and approved.

Note 1: Applicable research and monitoring programs may include programs undertaken in accordance with conditions attached to the approval for the Gladstone Western Basin Dredging and Disposal Project (EPBC 2009/4904).

Note 2: These conditions do not prevent the Gladstone Ports Corporation, on behalf of the proponent, from submitting a single dredge management plan which relates to both dredging for the construction dock under these conditions, and dredging undertaken under conditions attached to the approval for the Gladstone Western Basin Dredging and Disposal Project (EPBC 2009/4904).

Dredging and dredge disposal – Material Offloading Facility

34. Dredging and disposal of dredge material associated with the Material Offloading Facility is to be undertaken in accordance with conditions imposed under and by the holder of the approval for the Gladstone Western Basin Dredging and Disposal Project (EPBC 2009/4904).

Note: This condition does not prevent the proponent from undertaking dredging on behalf of the Gladstone Ports Corporation, under conditions attached to the approval for the Gladstone Western Basin Dredging and Disposal Project (EPBC 2009/4904).

Dredging operations – Construction Dock

35. The proponent must not undertake any underwater dredge material rehandling.

36. Only one trailer suction hopper dredge (TSHD) is permitted to operate within Gladstone Harbour at any given time.

37. When the TSHD is in use, a maximum of two cutter suction dredges may operate at any given time unless otherwise prescribed in an approved Water Quality Monitoring Program required under conditions attached to the Gladstone Western Basin Dredging and Disposal Project (EPBC 2009/4904).

38. The TSHD must not operate in overflow mode except during the last one hour of flood tide and first three hours of ebb tide unless otherwise in accordance with the approved Water Quality Monitoring Program.

39. The TSHD must not operate in overflow mode for more than 30 minutes per cycle, with no more than two cycles per tide unless otherwise in accordance with the approved Water Quality Monitoring Program.

40. Where construction and/or dredging methods with lower environmental impacts are identified to be practical, these methods must be implemented.

41. In this condition, "at any given time" means at any given time with any other dredging operations being undertaken by another holder of an approval relating to dredging activities in the Port of Gladstone.

Note: Similarly to conditions attached to the approval for the Gladstone Western Basin Dredging and Disposal Project (EPBC 2009/4904), these conditions are intended to limit the number of dredges being operated at any one time in Port Curtis.

Shipping Activity Management Plan

42. The proponent must prepare a Shipping Activity Management Plan ('the Plan') for shipping undertaken by or under the control of the proponent which includes:

    (a) provision for the protection of Dugongs (*Dugong dugon*); Green Turtles (*Chelonia mydas*); Loggerhead Turtles (*Caretta caretta*); Flatback Turtles (*Natator depressus*); Water Mouse,

(*Xeromys myoides*) and the seagrass species *Halodule uninervis, Halophila ovalis, Halophila decipens, Halophila minor, Halophila spinulosa*, and *Zostera capricorni*;

(b) identification of the habitats, activities, and environmental tolerances in relation to the shipping activity associated with this referral for the species specified in condition 42(a);

(c) to minimise environmental disturbance to the species mentioned in condition 42(a):

(i) limits on vessel speeds, including speeds for particular vessel types;

(ii) limits on vessel movements, including the use of thrusters; and

(iii) limits on vessel light and sound.

(d) a comprehensive outline of mitigation measures and controls for each of the types of shipping activities to minimise their impact on the species mentioned in condition 42(a), including actions to:

(i) prevent and respond to the impact of accidental fuel, oil or chemical spills;

(ii) minimise the impact of marine discharges, including those associated with vessel cleaning, anti-fouling and waste disposal;

(iii) minimise disturbance to the seagrass species mentioned in condition 42(a);

(iv) minimise the impact of bow-wash on Water Mouse (*Xeromys myoides*) nesting sites; and

(v) proposed remedial action in the event of any impacts directly attributable to the proponent's shipping activities on the species specified in condition 42(a), and the habitats identified in condition 42(b), including a feasible and beneficial offsets strategy.

(e) a comprehensive outline of monitoring arrangements to determine the impact of shipping activity on the species specified in condition 42(a), which includes:

(i) recommendations on the timing and frequency of species surveys;

(ii) proposed monitoring arrangements; and

(iii) the nature and frequency of proposed reporting arrangements.

43. Subject to condition 44 and 45, the plan required under condition 42 must be submitted for the approval of the Minister before commencement. The action must not commence until the plan has been approved. The approved plan must be implemented.

44. The plan required under condition 42 may be provided in two parts, to address:

(a) shipping associated with the construction of the LNG plant; and;

(b) LNG tanker operation and LNG tanker activities.

45. If the plan required under condition 42 is provided in two parts, each part must be provided before the commencement of the activity to which that part relates.

Note: The requirements under condition 42 may be included in a plan which the proponent provides to the State, including in a Marine Traffic Management Plan or a Shipping Transport Management Plan. If these State plans are provided for this purpose, that plan should explicitly state that it is also provided for the purposes of this condition, and clearly reference matters addressing the requirements above. It is acknowledged that, before approval of the first part of the Plan, minor vessel movements may be undertaken to facilitate early site access including for the initial construction of the Construction Dock

Quarantine Management Plan

46. Before the commencement of construction of the LNG plant and ancillary onshore facilities, the proponent must prepare a Quarantine Management Plan (QMP). The objectives of the QMP are to prevent the introduction of non-endemic species on to Curtis Island. The QMP must include measures to:

    (a) detect pests and weeds, and prevent weed introduction and/or proliferation;

    (b) control and, unless otherwise determined by the relevant State authorities, eradicate detected non-indigenous terrestrial species (including weeds);

    (c) mitigate adverse impacts of any control and eradication actions on indigenous species taken against detected pests and weeds;

    (d) assess risk, manage supply chains, and manage and inspect vessels;

    (e) mitigate any pest or weed impacts;

    (f) report and record any quarantine incidents;

    (g) identify performance standards to be achieved by the QMP; and

    (h) undertake a review of the QMP and identify the need for any further studies.

Note: To avoid doubt, the QMP may be submitted in stages, for example to cover the period prior to any planned direct arrival at the MOF of international imports, and after this time.

47. The QMP must be submitted for the approval of the Minister. Commencement must not occur without the approval in writing of the Minister. The approved Plan must be implemented.

Note: To avoid doubt, if a condition of another approval held by the proponent requires a Quarantine Management Plan, the proponent may simultaneously meet the relevant requirements of both conditions by submitting a single plan. The plan, or components thereof, may also be prepared and implemented in consultation with the Gladstone Ports Corporation or other bodies.

Environmental Management Plan – Water Mouse (*Xeromys myoides*)

48. To protect the Water Mouse (*Xeromys myoides*), the proponent must submit to the Minister an Environmental Management Plan (the Water Mouse Environmental Management Plan) which must include:

    (a) results of a pre-clearance survey undertaken at the appropriate time and season for the species;

(b) a map of the location of potential habitat for the Water Mouse in proximity to the LNG plant and ancillary onshore and marine facilities;

(c) measures that will be employed to avoid impacts on the Water Mouse or its potential habitat; and

(d) if impacts on the Water Mouse or its potential habitat are unavoidable, propose offsets to compensate for the impacts.

Note: To avoid doubt, if a condition of another approval held by the proponent requires a Water Mouse Environmental Management Plan, the proponent may simultaneously meet the relevant requirements of both conditions by submitting a single plan. The plan may also be prepared in consultation with the Gladstone Ports Corporation in accordance with conditions imposed for the Gladstone Western Basin Dredging and Disposal Project (EPBC 2009/4904).

49. The Water Mouse Environmental Management Plan must be submitted for the approval of the Minister within 6 months of this approval. The plan must be implemented.

Environmental Management Plan – Migratory Shorebirds

50. The proponent must submit to the Minister an Environmental Management Plan (the Migratory Shorebirds Environmental Management Plan) which includes measures for:

a. managing the impacts of the action on listed Migratory Shorebirds including but not limited to the Whimbrel (*Numenius phaeopus*) and the Terek Sandpiper (*Xenus cinereus*);

b. determining baseline population densities and habitat utilisation for migratory shorebirds on or contiguous to the proponent's LNG facility site including, at a minimum, undertaking annual/twice annual surveys during northwards and southwards migrations;

c. minimising impacts from noise and light on the feeding and roosting sites of listed migratory shorebirds; and

d. monitoring the effect of the construction of the marine facilities on shorebirds, including but not limited to, and to the extent relevant:

i. dredge vessel movement;

ii. pile driving;

iii. construction dredging;

iv. noise impulse levels;

v. light spill;

vi. water quality reduction;

vii. decreased access to intertidal foreshore habitat;

viii. increased sedimentation; and

ix. displacement.

51. The Migratory Shorebirds Environmental Management Plan must be submitted for the approval of the Minister. Commencement, other than Construction Dock dredging, must not occur without approval. The approved plan must be implemented.

Note: To avoid doubt, the Migratory Shorebirds Environmental Management Plan may be prepared in consultation with the Gladstone Ports Corporation under conditions imposed for the Gladstone Western Basin Dredging and Disposal Project (EPBC 2009/4904).

Long-term Marine Turtle Management Plan

52. Within six months of this approval, the proponent must

    (a) contribute an initial amount of $150,000 towards preparation of a Long Term Marine Turtle Management Plan; and

    (b) participate in industry wide discussions with the Gladstone Ports Corporation and other port users (including LNG proponents) with a view to establishing a Long Term Marine Turtle Management Plan and future funding requirements for the plan.

53. If terms of the Long Term Marine Turtle Management Plan cannot be agreed on an industry wide basis (within the Port of Gladstone) within six months of this approval, then the proponent must prepare a Long Term Marine Turtle Management Plan in consultation with other LNG proponents who have confirmed an intention to establish an LNG Facility on Curtis Island.

54. The plan (in either case referred to in 52 and 53 above), must include:

    (a) a program to establish comprehensive baseline information on populations of marine turtles that utilise the beaches and nearby waters of Curtis and Facing Island (including the Green Turtle *Chelonia mydas*, the Loggerhead Turtle *Caretta caretta*, and the Flatback Turtle *Natator depressus)*;

    (b) a monitoring program to measure and detect changes to the marine turtle populations over a period of at least 10 years from commencement of the program. Monitoring methods must have the ability to detect changes at a statistical power of 0.8, or an alternative statistical power as determined in writing by the Minister;

    (c) the identification of significant activities relating to the construction and operation of LNG facilities (or in the case of an industry wide plan, activities within the Port of Gladstone) with the potential to cause adverse impacts on marine turtles;

    (d) management measures including operating controls and design features to help manage and avoid adverse impacts to marine turtles shown to be adversely impacted by LNG operations (or in the case of an industry wide plan, activities conducted within the Port of Gladstone). In relation to the LNG operations, management measures will include any reasonable and practicable measures found necessary or desirable to minimise disturbance to marine turtles from gas flaring, and from lighting of the LNG plant and ships moored at the loading berth (except where the adoption of measures would be in contravention of health and safety legislative requirements).

    (e) identification of annual contributions by the proponent, other LNG proponents who have confirmed an intention to establish an LNG Facility on Curtis Island and, in the case of an industry wide plan, contributions by other port users.

55. The Long Term Marine Turtle Management Plan must be submitted for the approval of the Minister at least 3 months before the planned date of the commissioning of the first LNG train. The approved Plan must be implemented.

56. Within 60 days of each anniversary of the approval of the plan the proponent must provide a review report ("the Report") of the effectiveness of the management measures and operating controls directed at avoiding impacts on the marine turtle species.

    Note: The review report may be provided by the Gladstone Ports Corporation or another entity on behalf of the proponent.

57. If an impact on any of the marine turtle species is identified, the report must recommend improvements to the conduct of those operations and activities which are found to have a causal connection with the identified impact, and provide the report to the Minister in writing within 30 days of identifying the impact. The Minister may require improvements to be implemented.

    Note: To avoid doubt, if a condition of another approval held by the proponent requires a Turtle Management Plan, the proponent may simultaneously meet the relevant requirements of both conditions by submitting a single plan. The plan may also be prepared and implemented in consultation with the Gladstone Ports Corporation or other bodies.

Decommissioning Plan

58. Unless the proponent advises the Department that it cannot decommission the site or sites where the LNG plant and ancillary onshore and marine facilities are located, because of lawful continuing use rights by a third party (that might include the State of Queensland), at least five years before the planned date of cessation of operations of the LNG Facility and associated infrastructure on Curtis Island the proponent must develop a Decommissioning Plan. The Plan must:

    (a) ensure that, following the cessation of operations at the LNG Facility and associated infrastructure on Curtis Island, decommissioning arrangements are prepared;

    (b) define a timetable for the future implementation of decommissioning including for:

        (i) the removal of remnant infrastructure and works that interfere with natural coastal processes, and human recreational and commercial activities;

        (ii) the return of sediment levels and water quality in the immediate area of the LNG Facility to pre-construction background levels; and

        (iii) the rehabilitation of the LNG Facility and associated sites to their natural state, and their ongoing management during rehabilitation.

59. If decommissioning does not commence on the date proposed in the initial Decommissioning Plan, the proponent must review the Decommissioning Plan before each subsequent third anniversary of the date of the submission of the initial Decommissioning Plan over the operational life of the LNG facility. The proponent must advise the Minister in writing of the outcomes of this review, including any proposed changes to the Decommissioning Plan. Any proposed changes to the Decommissioning Plan must be approved in writing by the Minister.

60. The Decommissioning Plan must be submitted for the approval of the Minister. Decommissioning must not occur without approval of the Minister. Subject to condition 58 the approved Plan must be implemented on decommissioning.

Joint Plans

61. A management plan required under these conditions may comprise a plan (a joint plan) submitted by the Gladstone Ports Corporation under conditions of approval for the Western Basin Dredging and Disposal Project (EPBC 2009/4904) or another LNG proponent. If a joint plan is submitted by the GPC or another LNG proponent for this purpose, it must also be specified as a plan for the purpose of (as relevant) these conditions.

62. If a joint plan is submitted under these conditions the plan may specify roles and responsibilities of the proponent, and the roles and responsibilities of another person. A role and responsibility of the proponent must be implemented by the proponent, unless otherwise specified in the joint plan.

Note: The purpose of this condition is to allow a single management plan to be submitted by different proponents to satisfy the requirements of conditions of separate but related approvals, so that actions with related potential impacts may be considered and addressed cumulatively

Notification of commencement

63. Within 20 business days of commencement of the action, the proponent must advise the Department in writing of the actual date of commencement.

64. If, at any time after five years from the date of this approval, the Minister notifies the proponent in writing that the Minister is not satisfied that there has been commencement of the action, the action must not commence without the written agreement of the Minister.

Request for variation of plans by proponent

65. If the proponent wants to act other than in accordance with a plan approved by the Minister under these conditions, the proponent must submit a revised plan for the Minister's approval.

66. If the Minister approves a revised plan, then that plan must be implemented instead of the plan originally approved.

67. Until the Minister has approved the revised plan, the proponent must continue to implement the original plan.

Revisions to plans by the Minister

68. If the Minister believes that it is necessary or desirable for the better protection of a relevant controlling provision for the action, the Minister may request the proponent to make, within a period specified by the Minister, specified revisions to a plan approved by the Minister under these conditions.

69. If the Minister makes a request for revisions to a plan, the proponent must:

    (a) comply with that request; and

    (b) submit the revised plan to the Minister for approval within the period specified in the request.

70. The proponent must implement the revised plan, on written approval of the Minister.

71. Until the Minister has approved the revised plan, the proponent must continue to implement the original plan.

Minimum timeframes for consideration of plans

72. For any plan required to be approved by the Minister under these conditions, the proponent must ensure the Minister is provided at least 20 business days for review and consideration of any plan, unless otherwise agreed in writing between the proponent and the Minister.

Compliance with State environmental and other authorities

73. The proponent must comply with all environmental authorisations issued by the State, including conditions of an environmental authority issued under the EP Act.

Provision of State plans

74. If a condition of a State approval requires the proponent to provide a plan then the proponent must also provide the plan to the Department or Minister on request, within the period specified in the request

Timeframes

75. If these conditions require the proponent to provide something by a specified time, a longer period may be specified in writing by the Minister.

Auditing

76. On the request of and within a period specified by the Department, the proponent must ensure that:

    (a) an independent audit of compliance with these conditions is conducted; and

    (b) an audit report, which addresses the audit criteria to the satisfaction of the Department, is published on the Internet and submitted to the Department

77. Before the audit begins, the following must be approved by the Department:

    (a) the independent auditor; and

    (b) the audit criteria

78. The audit report must include:

    (a) the components of the project being audited;

    (b) the conditions that were activated during the period covered by the audit;

    (c) a compliance/non-compliance table;

    (d) a description of the evidence to support audit findings of compliance or non-compliance;

(e) recommendations on any non-compliance or other matter to improve compliance;

(f) a response by the proponent to the recommendations in the report (or, if the proponent does not respond within 20 business days of a request to do so by the auditor, a statement by the auditor to that effect);

(g) certification by the independent auditor of the findings of the audit report.

79. The financial cost of the audit will be borne by the proponent.

80. The proponent must:

(a) implement any recommendations in the audit report, as directed in writing by the Department;

(b) investigate any non-compliance identified in the audit report; and

(c) if non-compliance is identified in the audit report - take action as soon as practicable to ensure compliance with these conditions.

81. If the audit report identifies any non-compliance with the conditions, within 20 business days after the audit report is submitted to the Department the proponent must provide written advice to the Minister setting out the:

(a) actions taken by the proponent to ensure compliance with these conditions; and

(b) actions taken to prevent a recurrence of any non-compliance, or implement any other recommendation to improve compliance, identified in the audit report

Note: To avoid doubt, independent third party auditing may include audit of the proponent's performance against the requirements of any plan required under these conditions.

Reporting non-compliance

82. The proponent must, when first aware of a non-compliance of any condition of this approval, or a plan required to be approved by the Minister under these conditions:

(a) report the non-compliance and remedial action to the Department within five business days; and

(b) bring the matter into compliance within a reasonable timeframe agreed to, in writing by the Department.

Record-keeping

83. The proponent must:

(a) maintain accurate records substantiating all activities associated with or relevant to these conditions of approval, including measures taken to implement a plan approved by the Minister under these conditions; and

(b) make those records available on request to the Department. Such records may be subject to audit by the Department or an independent auditor in accordance with section 458 of the EPBC Act, or used to verify compliance with these conditions of approval.

Note: Summaries of audits carried out under these conditions, or under section 458 of the EPBC Act, will be posted on the Department's website. The results of such audits may also be publicised through the general media.

Financial assurance

84. The proponent must:

    (a) provide the Minister with a financial assurance in the amount and form required from time to time by the Minister for activities to which these conditions apply; and

    (b) review and maintain the amount of financial assurance based on proponent reporting on compliance with these conditions, and any auditing of the activities.

85. The financial assurance is to remain in force until the Minister is satisfied that no claim is likely to be made on the assurance.

    Note: The financial assurance may be used for rehabilitation of habitat and other purposes not addressed adequately by the proponent during the life of the project.

Annual Environmental Return

86. The proponent must produce an Annual Environmental Return which:

    (a) addresses compliance with these conditions;

    (b) records any unavoidable adverse impacts on MNES, mitigation measures applied to avoid adverse impacts on MNES; and any rehabilitation work undertaken in connection with any unavoidable adverse impacts on MNES;

    (c) identifies all non-compliances with these conditions;

    (d) identifies any amendments needed to plans to achieve compliance with these conditions.

87. The proponent must publish the Annual Environmental Return on its website within 20 calendar days of each anniversary date of this approval. In complying with this publication requirement, the proponent must ensure that it has obtained relevant rights in relation to confidentiality and intellectual property rights of third parties.

Survey data

88. If requested by the Department, the proponent must provide all species and ecological survey data and related survey information from ecological surveys undertaken for MNES. The data must be collected and recorded to conform to data standards notified from time to time by the Department.

Publication of Plans

89. All plans approved by the Minister under these conditions must be published on the proponent's website within 30 business days of approval by the Minister.

90. The Department may request the proponent to publish on the internet a plan in a specified location or format and with specified accompanying text. The proponent must comply with any such request.

Dictionary

91. In these conditions, unless otherwise indicated:

CEMP means the Construction Environmental Management Plan developed as required under conditions 24 to 26;

Conditions means these conditions attached to the approval of the action;

Commencement means the substantial commencement of construction of the proposed LNG plant and ancillary onshore and marine facilities as described in referral EPBC 2009/4977 received under the EPBC Act on 6 July 2009. Commencement does not include minor physical disturbance necessary to undertake pre-clearance surveys, to establish monitoring programs or associated with mobilisation of plant, equipment, materials, machinery and personnel prior to start of construction of the LNG plant and ancillary onshore and marine facilities;

Commissioning means the point at which, following completion of the construction of the first LNG train, it is tested to verify if it functions according to its design objectives or specifications;

Construction workforce means both personnel directly employed by the proponent and sub-contracted personnel engaged on-site during the construction of the LNG facility, including associated works and infrastructure;

Dredge material rehandling means the dredging technique of temporary seabed deposition of dredged material with subsequent re-dredging;

Dredging activities means all activities associated with the dredging and disposal including:

i the excavation or dredging of the material;
ii the loading and carriage of dredged material for the purpose of dumping;
iii the dumping of the material at the prescribed disposal and land reclamation sites.

Department means the Australian Government department responsible for administering Part 4 of the EPBC Act;

EP Act means the *Environmental Protection Act 1994* (Qld);

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

Minister means the Minister responsible for Chapter 4 of the EPBC Act, and may include a delegate of the Minister under s.133 of the EPBC Act;

MNES means one or more matters of national environmental significance under the EPBC Act that are included within the controlling provisions determined by the Minister for the action;

OEMP means the Operational Environmental Management Plan developed as required under conditions 27 to 29;

Plan includes a report, study, plan, or strategy (however described);

Proponent means the person to whom the approval is granted, and includes any person acting on behalf of the proponent;

QMP means the Quarantine Management Plan developed as required under conditions 46 to 47;

Referral means a referral under the EPBC Act;

SDPWO Act 1971 means the *State Development and Public Works Organisation Act 1971* (Qld);

Suitably qualified person means a person who has professional qualifications, training, skills or experience relevant to the nominated subject matter and can give authoritative assessment, advice and analysis to performance relative to the subject matter using the relevant protocols, standards, methods or literature;

Vessel operators means operators (whether or not employed by the proponent), and their employees, responsible for operating vessels travelling from the mainland to Curtis Island during the pre-clearance survey, construction, and operating phases of the LNG facility.

92. Unless the contrary is indicated, words in these conditions have the same meaning as in (in the following order of priority)

    (a) the EPBC Act; and
    (b) the EP Act.

93. Unless the contrary is indicated, in these conditions:

    (a) words in the singular number include the plural and words in the plural number include the singular; and

    (b) condition headings and notes are inserted for convenient reference only and have no effect in limiting or extending the language of condition to which they refer.

Figure 1 – Proposed location of APLNG LNG plant and ancillary onshore and marine facilities on Curtis Island

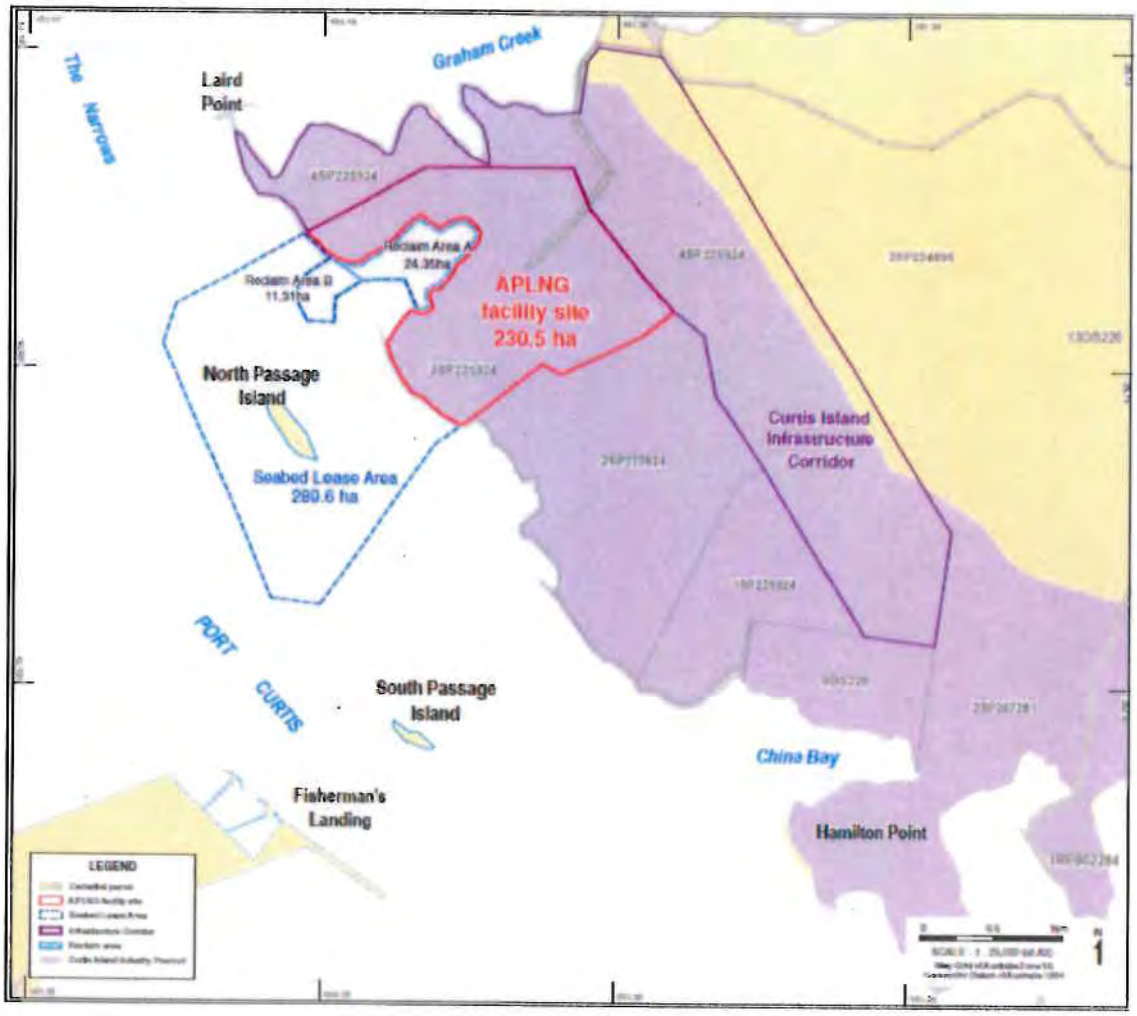
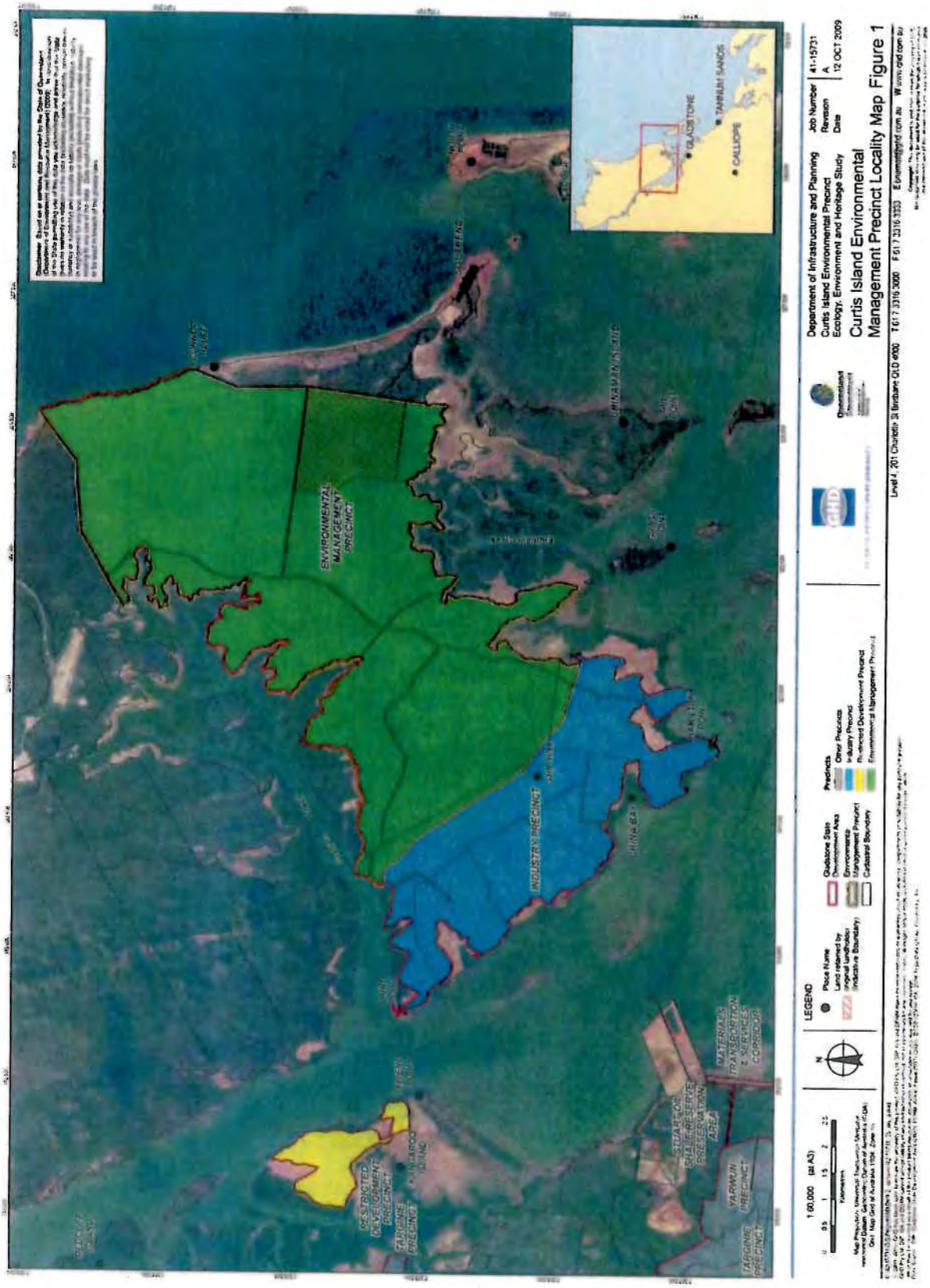
Figure 2 - Map of Curtis Island Environmental Management Precinct