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Published on: 19 November 2012

Statement No. 917

**STATEMENT THAT A FUTURE PROPOSAL(S)  
IDENTIFIED IN A STRATEGIC PROPOSAL MAY BE IMPLEMENTED  
(Sections 40B and 45 of the *Environmental Protection Act 1986*)**

**Strategic Proposal:** Browse Liquefied Natural Gas (LNG) Precinct located at James Price Point as shown and delineated on Figure 1 attached to this Statement

**Proponent:** Minister for State Development

**Proponent Address:** 197 St George's Terrace, PERTH WA 6000

**Assessment Number:** 1730

**Report of the Environmental Protection Authority:** 1444

**Appeal Determination:** Appeal numbers 061 to 304 of 2012

Pursuant to sections 40B and 45 of the *Environmental Protection Act 1986* (the Act), it has been agreed or decided that in the event of a declaration by the Environmental Protection Authority (EPA) pursuant to section 39B of the Act that it is a derived proposal, a proposal to do one or more of the Developments, Activities, Operations or Changes in Land Use listed in Column 2 of Table 1 in Schedule 1 of this Statement and which was identified in the Strategic Proposal to which Report 1444 relates, may be implemented. Upon declaration that the proposal is a derived proposal, subject to the Minister for Environment's identification of relevant conditions under section 45A(3) of the Act, the implementation of the proposal shall be subject to the following implementation conditions and procedures:

Note: Words and expressions used in these conditions shall have the same respective meanings as in the Act or as provided for in Schedule 5.

**1. Development, Activities, Operations or Changes in Land Use shall not exceed Limits/Extents in Table 1 in Schedule 1**

- 1-1 Proposals referred to the Environmental Protection Authority and declared to be derived proposals containing one or more of the Developments, Activities, Operations or Changes in Land Use listed in Column 2 of Table 1, shall not exceed the Description of Limits/Extent, relevant to the Developments/Activities/Operations or Changes in Land Use provided for in Column 3 of Table 1.

Note: It may be that more than one proponent implements the Proposal identified in Table 1.

**2 Proponent Details**

- 2-1 The proponent shall notify the Chief Executive Officer of the Office of the Environmental Protection Authority (CEO) of any change of its name, physical address or postal address for the serving of notices or other correspondence within 28 days of such change. Where the proponent is a corporation or an association of persons, whether incorporated or not, the postal address is that of the principal place of business or of the principal office in the State.

**3 Time Limit of Authorisation**

- 3-1 The proponent must ensure that the Proposal is substantially commenced within five years of the date of the section 45A Notice.
- 3-2 The proponent shall provide the CEO with written evidence which demonstrates that the Proposal has substantially commenced on or before the expiration of five years from the date of the section 45A Notice.

**4 Compliance Reporting**

- 4-1 The proponent shall continuously monitor its compliance with the implementation conditions including the compliance with the requirements specified in all plans, programs, reports or strategies prepared in accordance with these conditions and approved by the CEO.
- 4-2 Subject to specific reporting requirements referred to in other conditions below, the proponent is required to advise the CEO of any non-compliance or potential non-compliance within seven days of the non-compliance or potential non-compliance being known to the proponent.
- 4-3 The proponent shall appoint an environmental auditor to audit compliance with the implementation conditions, including compliance with the requirements specified in all plans, programs, reports or strategies prepared and approved in accordance with these conditions and prepare the annual Compliance Assessment Report. The environmental auditor must not be a current or former

officer, employee or consultant of the proponent and the appointment must be approved by the CEO.

- 4-4 The proponent shall submit to the CEO an annual Compliance Assessment Report, with the first Compliance Assessment Report addressing the 12 month period commencing from the date of the section 45A Notice and being submitted on or before the expiration of 15 months after the date of the section 45A Notice and with subsequent Compliance Assessment Reports addressing the 12 month period commencing one day following the date the previous reporting period ceased and being submitted on or before the expiration of 12 months from the due date for the submission of the first Compliance Assessment Report.
- 4-5 The proponent shall ensure that each Compliance Assessment Report is:
- i. prepared in accordance with the Office of the Environmental Protection Authority's *Post Assessment Guideline for Preparing a Compliance Assessment Report*, as amended from time to time.
  - ii. accurate and includes the following information:
    - a. an audit framework prepared in accordance with the Office of the Environmental Protection Authority's *Post Assessment Guideline for Preparing an Audit Table*, as amended from time to time;
    - b. details of, including where relevant the extent of and impacts associated with, all non-compliances and potential non-compliances with the implementation conditions, which apply to the Proposal, within the preceding 12 month period;
    - c. all remedial and/or corrective action taken in respect of the non-compliance; and
    - d. procedures, protocols, practices ("**measures**") in place to prevent the non-compliance or potential non-compliance before it occurred and details of any amendments to those measures to prevent re-occurrence.
  - iii. signed by the environmental auditor, the proponent, if the proponent is an individual, or a person who is a director or the director's delegate, if the proponent is a public body, company or association or body of persons, corporate or unincorporated.
  - iv. made available to the public in accordance with the Office of the EPA's *Post Assessment Guideline for Making Documents Publicly Available*, as amended from time to time.
  - v. retained and accessible for the life of the Proposal.
- 4-6 The proponent shall prepare and submit to the CEO, the audit framework referred to in condition 4-5 within 60 days of the date of issue of the section 45A Notice.
- 4-7 The CEO has the discretion, by notice in writing, to:

- i. require the proponent to submit a Compliance Assessment Report more or less frequently than annually and alter the period addressed by the Compliance Assessment Report;
- ii. alter the due date of the Compliance Assessment Reports;
- iii. prescribe the manner in which Compliance Assessment Reports are made available to the public, should this be necessary; and
- iv. where a Compliance Assessment Report contains trade secrets or documentation that would reveal information of a commercial value, the CEO has the discretion to waive the requirement to make any of the Compliance Assessment Report, in part or wholly, publicly available, should this be requested by the proponent.

## **5 Terrestrial Facilities and Disturbance Footprint Plan**

5-1 The proponent shall not undertake any ground disturbing activities or commence installation of the terrestrial facilities prior to having obtained the Minister's approval, on advice of the EPA, of its Terrestrial Facilities and Disturbance Footprint Plan.

5-2 In seeking approval for the Terrestrial Facilities and Disturbance Footprint Plan, the proponent shall submit the following information relevant to the Proposal:

- i. a plan showing the proposed terrestrial facilities and disturbance footprint for:
  - a. the infrastructure / corridor developments and uses listed in Table 1, within 13 kilometres of the boundary of Area B, as depicted in Figure 1 and defined by coordinates in Schedule 2;
  - b. heavy industrial and supporting developments and uses listed in Table 1, within the boundaries of Area B shown on Figure 1 and defined by the coordinates in Schedule 2;
  - c. light industrial developments and uses listed in Table 1, within the boundaries of Area C shown on Figure 1 and defined by the coordinates in Schedule 2;
  - d. accommodation developments and uses, listed in Table 1, within the boundaries of Area D shown on Figure 1 and defined by the coordinates in Schedule 2;
  - e. the terrestrial component of the pipelines listed in Table 1, within the boundaries of Areas E or F shown on Figure 1 and defined by the coordinates in Schedule 2; and
  - f. the terrestrial components of the Integrated Marine Facility listed in Table 1, within the boundaries of Area A shown on Figure 1 and defined by the coordinates in Schedule 2.
- ii. spatial data in a format compatible with a Geographical Information System acceptable to the CEO;

- iii. confirmation that the total area of terrestrial native vegetation cleared directly and indirectly as a result of the terrestrial disturbance proposed in the Terrestrial Disturbance Footprint Plan does not exceed the extent of clearing of terrestrial native vegetation permissible for the Proposal as set out in Table 1.
  - iv. confirmation that the total area of Monsoon Vine Thicket vegetation cleared directly and indirectly as a result of the terrestrial disturbance proposed in the Terrestrial Facilities and Disturbance Footprint Plan does not exceed 83 hectares in the implementation of the foundation proposal nor exceed 110 hectares in the implementation of any combination of derived proposals.
  - v. the advice of the Browse LNG Precinct Control Group that the Terrestrial Facilities and Disturbance Footprint Plan meets the following criteria:
    - a. the proposed disturbance footprint ensures that the facilities' design meets best practice standards;
    - b. the facilities' design minimizes the disturbance footprint having regard to other likely future proposals;
    - c. the facilities' design provides for a sharing of infrastructure and services corridors so that the disturbance footprint from related future proposals is minimised;
    - d. the facilities design meets the State's needs for infrastructure sharing.
  - vi. the Terrestrial Baseline State Report required by condition 6-1; and
  - vii. evidence that relevant stakeholders, including Traditional owners, have been consulted about the terrestrial facilities and disturbance footprint; been given a reasonable opportunity to comment and how their comments have been addressed.
- 5-3 The proponent shall not cause or allow Material or Serious Environmental Harm outside of the terrestrial facilities disturbance footprint as shown in the approved Terrestrial Facilities and Disturbance Footprint Plan and shall ensure construction of the terrestrial facilities is consistent with the approved Terrestrial Facilities and Disturbance Footprint Plan.
- 5-4 The total area of Monsoon Vine Thicket vegetation cleared, directly or indirectly, as a result of the implementation of the Proposal, shall not exceed 83 hectares in the implementation of the foundation proposal nor exceed 110 hectares in the implementation of any combination of derived proposals within the area delineated by a green bold line in Figure 2 and defined by coordinates in Schedule 2.
- 5-5 The total area of native terrestrial vegetation, other than Monsoon Vine Thicket vegetation, cleared directly or indirectly, as a result of the implementation of the Proposal, shall not exceed the areas as set out in Table 1 of Schedule 1.

## **6 Terrestrial Baseline State Report**

6-1 The proponent shall not commence any ground disturbing activities or commence installation of the terrestrial facilities prior to:

- i. submitting a Terrestrial Baseline State Report to the CEO, and
- ii. receiving written notice from the CEO, having consulted the Department of Environment and Conservation (DEC), that the Terrestrial Baseline State Report meets the requirements in condition 6.

6-2 The Terrestrial Baseline State Report shall cover the following ecological elements:

- i. *Wildlife Conservation Act 1950* declared Rare Flora (Declared Rare Flora), Threatened Ecological Communities and DEC listed priority vegetation and flora and flora; and
- ii. Specially protected (threatened) fauna, DEC listed priority fauna and habitat-;

and must meet the requirements of conditions 6-3 and 6-4 below.

6-3 The Terrestrial Baseline State Report shall:

- i. identify, define and map the pre-development baseline state for the ecological elements, referred to in condition 6-2, inside and outside the terrestrial facilities and disturbance footprint, defined in the Terrestrial Facilities and Disturbance Footprint Plan, that may be at risk of Material or Serious Environmental Harm due to the implementation of the Proposal;
- ii. identify, define and map the ecological elements at reference sites (see condition 8-3), which are not at risk of Material or Serious Environmental Harm due to the implementation of the Proposal;
- iii. identify, define and map the likely threats to the ecological elements identified, defined and mapped in accordance with condition 6-3i, including clearing, emissions and discharges; and
- iv. define indicators, parameters and criteria to be used in measuring changes to the ecological elements outside the terrestrial facilities and disturbance footprint and the ecological elements reference sites (see condition 8-3).

6-4 The Terrestrial Baseline State Report shall include:

- i. results of the further assessment of the likelihood and consequence of the impacts of the implementation of the Proposal's terrestrial facilities on the ecological elements identified in the Baseline State Report required by condition 6-1;
- ii. details of the methodology used to survey, collect and collate the baseline data and information for all ecological elements identified in condition 6-3;
- iii. a description and map of the ecological elements which are at risk of Material or Serious Environmental Harm outside the Terrestrial Facilities and Disturbance Footprint due to the implementation of the Proposal;

- iv. a description of existing areas of disturbance, including cleared areas, existing areas containing weeds and disturbed landscapes;
- v. spatially accurate, rectified and geographically referenced maps showing the baseline data and information for the ecological elements identified in condition 6-3;
- vi. discussion of the data on the baseline biological, physical and chemical variables including any significant relationships, for the ecological elements identified in condition 6-3;
- vii. ecological elements to be protected, such as Declared Rare Flora, threatened ecological communities, Threatened Species under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act), habitats of specially protected (threatened) fauna and DEC listed priority fauna;
- viii. an analysis of, and procedures to address data and information gaps associated with the baseline data for the areas identified in condition 6-4 iii;
- ix. a description and map of the ecological elements at reference sites in locations which are not at risk of Material or Serious Environmental Harm due to implementation of the Proposal; and
- x. evidence of consultation with the DEC in the preparation of the Report and in determining the methodology used to survey, collect and collate the baseline data and information referred to in condition 6-3.

## **7 Terrestrial Environment Protection Program**

- 7-1 The proponent shall not commence any ground disturbing activities or commence installation of the terrestrial facilities prior to:
- i. submitting a Terrestrial Environment Protection Program to the CEO; and
  - ii. receiving written notice from the CEO, having consulted DEC that the Terrestrial Environment Protection Program meets the requirements of condition 7.
- 7-2 The Terrestrial Environment Protection Program is to be designed to meet the following objectives:
- i. to locate the terrestrial facilities within the areas identified in Figure 1 to avoid and minimise the adverse impacts from the construction and operation of the terrestrial facilities as far as practicable;
  - ii. to reduce adverse impacts from the construction and operation of the terrestrial facilities as far as practicable; and
  - iii. to ensure that construction and operation of the terrestrial facilities does not cause Material or Serious Environmental Harm outside the terrestrial facilities and disturbance footprint identified in the Terrestrial Facilities and Disturbance Footprint Plan.

- 7-3 The Terrestrial Environment Protection Program shall include the following:
- i. management measures informed by the results of the assessment required by condition 6-3 i to reduce adverse impacts (including from light and noise) from the construction and operation of terrestrial facilities as far as practicable;
  - ii. management measures, triggers and strategies to ensure that the implementation of the Proposal does not cause Material or Serious Environmental Harm outside the terrestrial facilities and disturbance footprint identified in the Terrestrial Facilities and Disturbance Footprint Plan;
  - iii. a clear demonstration that contemporary best practice has been used in the design, location, construction and operation of the Proposal to minimise clearing and indirect impacts on Threatened Ecological Communities including Monsoon Vine Thicket vegetation;
  - iv. a regional survey, management measures, triggers and strategies to ensure that construction and operation of terrestrial facilities does not result in a reduction in the overall regional conservation status of the Greater Bilby (*Macrotis lagotis*); and
  - v. measures to avoid the attraction of dingoes to the precinct and to discourage employees from feeding or otherwise interacting with dingoes and other native fauna.

- 7-4 The measures required by condition 7-3 shall address but not be limited to:
- i. vegetation Clearing Audit Procedures to ensure the extent of clearing and rehabilitation can be determined on an annual basis;
  - ii. procedures in relation to, and protocols for capturing, relocating, handling, housing, caring for and reporting specially protected (threatened) fauna, and DEC listed priority fauna found within the terrestrial facilities and disturbance footprint identified in the Terrestrial Facilities and Disturbance Footprint Plan;
  - iii. procedures to avoid and mitigate secondary impacts to specially protected (threatened) fauna or DEC listed priority fauna including events such as fauna being trapped in construction trenches or subject to vehicle strike;
  - iv. the proponent reporting any specially protected (threatened) fauna or DEC listed priority fauna deaths within the terrestrial facilities and disturbance footprint as identified in the Terrestrial Facilities and Disturbance Footprint Plan attributable to the implementation of the proposal:
    - a. to the CEO within 48 hours of detection; and
    - b. in its Compliance Report required by condition 4;
  - v. management strategies and options to reduce the risk of disturbance, injury or mortality to individual Greater Bilbies (*Macrotis lagotis*) including things such as design and location of infrastructure, imposition of speed limits and curfews on vehicle movement in areas where evidence of Greater Bilby activity has been observed within the previous 12 months;



- vi. a translocation strategy developed in consultation with DEC where impacts to occupied Greater Bilby (*Macrotis lagotis*) burrows are unavoidable; and
- vii. performance standards against which achievement of the objectives of condition 7 can be determined.

7-5 The proponent shall report any Material or Serious Environmental Harm outside the Terrestrial Disturbance Footprint to the CEO within 48 hours of detection.

7-6 The proponent shall advise relevant stakeholders of the opportunity to comment on a draft copy of the Terrestrial Environment Protection Program required under condition 7-1 and provide those stakeholders at least 14 days to comment on the program before it is submitted to the CEO for approval under condition 7-1.

7-7 The proponent shall implement the Terrestrial Environment Protection Program which meets the requirements specified in these conditions.

## **8 Terrestrial Environment Monitoring Program**

8-1 The proponent shall not commence any ground disturbing activities or commence installation of any terrestrial facilities prior to:

- i. submitting a Terrestrial Environment Monitoring Program to the CEO, and
- ii. receiving written notice from the CEO, having consulted DEC, that the Terrestrial Environment Monitoring Program meets the requirements of condition 8.

8-2 The objective of the Terrestrial Environment Monitoring Program is to establish a statistically valid ecological monitoring program to ensure the detection and immediate cessation of any Material or Serious Environmental Harm to the ecological elements outside the Terrestrial Disturbance Footprint.

8-3 The Terrestrial Environment Monitoring Program shall include:

- i. indicators, parameters and criteria to be used in measuring changes in the ecological elements identified in the Terrestrial Baseline State Report that are at risk of Material or Serious Environmental Harm due to construction and operation of terrestrial facilities;
- ii. protocols for on-going reporting of adverse changes to the ecological elements identified in the Terrestrial Baseline State Report;
- iii. Management triggers linked to management measures set out in the program required under condition 7-1 designed to prevent environmental harm;
- iv. protocols for identifying additional areas not originally identified that are at risk of sustaining Material or Serious Environmental Harm from the Proposal, and for adding monitoring sites to include these additional locations, if required;

- v. establishment of an ecological monitoring program based on tests using appropriate effect size(s) and that has statistical power values as approved by the CEO, to detect any environmental harm to the ecological elements identified in the Terrestrial Baseline State Report;
- vi. location of monitoring sites in areas that are at risk of Material or Serious Environmental Harm due to construction and operation of terrestrial facilities; and
- vii. location of reference sites which will not be at risk of Material or Serious Environmental Harm due to construction and operation of terrestrial facilities so that they can serve as a basis for comparison with sites containing the same ecological elements at risk of Material or Serious Environmental Harm due to construction and operation of terrestrial facilities.

8-4 The proponent shall implement the Terrestrial Environment Monitoring Program which meets the requirements specified in condition 8.

## **8A Marine Fauna Survey and Management Program**

8A-1 Prior to the installation of any marine facilities the proponent shall prepare a Marine Fauna Survey and Management Program, for approval by the CEO on advice of the DEC, to enhance existing knowledge of DEC listed priority marine vertebrate fauna in the vicinity of James Price Point, and to guide management and planning processes so as to minimise impacts at the individual level and ensure conservation at the population level.

8A-2 The first phase of the Program shall be to commission appropriate independent experts to review all of the available data and information for each of the DEC listed priority marine vertebrate fauna, and identify where and how additional data gathering should be undertaken to minimise impacts at the individual level and ensure conservation at the population level for each species.

8A-3 The proponent shall conduct surveys of dugong, cetaceans and sawfish before, during and after construction. The surveys are to be designed and undertaken so that impacts from the implementation of the proposal on these animals may be routinely monitored and minimised.

8A-4 The Marine Fauna Survey and Management Program shall include provisions to:

- i. define specific marine fauna management zones;
- ii. avoid impacts to marine mammals consistent with the *Wildlife Conservation (Close Season for Marine Mammals) Notice 1998*;
- iii. designate vessel corridors that avoid to the fullest extent practicable critical habitat for dugongs, marine turtles and cetaceans specially protected under the *Wildlife Conservation Act 1950*; and
- iv. ensure all jetties connecting the main breakwaters to shore are of open-pile construction;

8A-5 The proponent shall implement the Marine Fauna Survey and Management Program which meets the requirements specified in conditions 8A-1 to 8A-4.

## **9 Marine Facilities and Impact Zones Plan**

9-1 The proponent shall not commence any installation or maintenance of any marine facilities as defined in Table 1 in the Port Area; the Pipeline Corridor Areas or the Shipping Channel Area prior to obtaining the Minister's approval, on advice of the EPA, of a plan showing the Marine Facilities and Impact Zones (the "Marine Facilities and Impact Zones Plan") which meets the requirements specified in this condition.

9-2 In seeking approval for the Marine Facilities and Impact Zones Plan, the proponent shall submit the following information:

- i. the advice of the Browse LNG Precinct Control Group that the Marine Facilities and Impact Zones Plan meets the following criteria:
  - a. the design of the marine facilities meets contemporary best practice standards;
  - b. the marine facilities design minimizes the area of marine impact having regard to other likely future proposals;
  - c. the marine facilities design provides for a sharing of infrastructure and services so that the marine impact zones are not extended and will not be exceeded as a result of the implementation of any future proposals; and
  - d. the marine facilities design meets the State's needs for infrastructure sharing.
- ii. the Dredging, Marine Facilities and Pipeline Installation Environmental Monitoring and Management Program (see condition 10);
- iii. the Report on the outcomes of the baseline State of the Marine Environment Surveys (see condition 11); and
- iv. evidence that relevant stakeholders have been consulted about the marine facilities and impact zones, have been given a reasonable period to comment, and how those comments have been addressed.

9-3 The Marine Facilities and Impact Zones Plan shall:

- i. define the location and configuration of all marine facilities and Zone(s) of High Impact, Zone(s) of Moderate Impact and Zone(s) of Influence associated with installation, operation and maintenance of the marine facilities;
- ii. include spatial data in a format compatible with a Geographical Information System, acceptable to the CEO, that defines the locations of all marine facilities and zones of impact and influence described above; and
- iii. meet all the requirements specified in conditions 9-4 to 9-7.

Note: The Zone of High Impact, Zone of Moderate Impact and Zone of Influence have meanings as defined in the EPA's Environmental Assessment Guideline No.7.

- 9-4 All marine facilities must be designed using contemporary best practice so as to ensure:
- i. environmental impacts are minimized and the Zone of High Impact is limited as far as practicable notwithstanding the specifications provided for in condition 9-5; and
  - ii. that all marine facilities are wholly located within the boundaries of the Port Area, Shipping Channel Area and the Pipelines Corridor Area shown on Figure 1 and defined by coordinates in Schedule 2.
- 9-5 The outer extremities of the Zones of High Impact defined in the Marine Facilities and Impact Zones Plan must be;
- i. less than 500 metres from the marine facilities located in the Port Area or Shipping Channel Area; and
  - ii. less than 500 metres from the centreline of any pipeline in the Pipeline Corridor Area,
- unless and until revised boundaries are approved by the Minister in accordance with condition 10-8.
- 9-6 The Zone of Moderate Impact referred to in the Marine Facilities and Impact Zones Plan must be confined to an area bounded by a line extending two kilometres due south from Cape Boileau, then west to the State Waters boundary, and a line west from a point 3 kilometres south of Coulomb Point to the boundary of State Waters unless and until revised limits are approved by the Minister in accordance with condition 10-8.
- 9-7 The Zones of High Impact, Moderate Impact and Influence defined in the Marine Facilities and Impact Zones Plan must be based on outputs of impact simulation modelling that incorporate specific mitigation measures and contemporary best practice management of turbidity generating activities.
- 9-8 The proponent shall ensure construction, maintenance and operation of the marine facilities achieves the following marine environmental protection outcomes:
- i. no irreversible loss of, or serious damage to, benthic habitats outside the Zone of High Impact shown in the approved Marine Facilities and Impact Zones Plan;
  - ii. no detectable negative changes to benthic habitats relative to the baseline state of those habitats outside the Zones of High and Moderate Impact shown in the approved Marine Facilities and Impact Zones Plan; and
  - iii. unless otherwise agreed in writing between the proponent and the owner of any commercial pearl farming enterprise within 20 kilometres of James Price Point, no detectable negative changes to the health, productivity and quality of commercially farmed pearl oysters and their saleable products in

the event that pearl oysters continue to be farmed within 20 kilometres of James Price Point once the proposal proceeds.

Note: benthic habitats relevant to this condition are those that include seagrass, filter feeders (including commercial pearl oysters), algae or scleractinian corals as their major biological components.

9-9 The proponent shall ensure that no dredge spoil is permanently placed in State Waters. Where the proponent can demonstrate that temporary placement of dredge spoil in State waters is essential, such placement shall be within the Zone of High Impact consistent with the provisions of a Dredging, Marine Facilities and Pipeline Installation Environmental Monitoring and Management Program as approved by the CEO.

## **10 Dredging, Marine Facilities and Pipeline Installation Environmental Monitoring and Management Program**

10-1A Prior to commencement of any dredging or installation of marine facilities or pipelines, the proponent shall establish a dredging expert panel to advise on, and to oversee the preparation and implementation of the Dredging, Marine Facilities and Pipeline Installation Environmental Monitoring and Management Program. The Minister for Environment shall appoint the expert panel, including an independent expert chair and at least one other independent expert.

10-1 The proponent shall not commence any turbidity-generating activities or commence installation of or maintenance of the marine facilities, prior to:

- i. submitting a Dredging, Marine Facilities and Pipeline Installation Environmental Monitoring and Management Program to the CEO, and
- ii. receiving written notice from the CEO that the Dredging, Marine Facilities and Pipeline Installation Environmental Monitoring and Management Program meets the requirements of condition 10.

10-2 The Dredging, Marine Facilities and Pipeline Installation Environmental Monitoring and Management Program shall meet the following objectives for turbidity-generating activities which are part of the installation and maintenance of marine facilities:

- i. achieve the environmental protection outcomes specified in condition 9;
- ii. achieve management targets established under condition 10-3; and
- iii. reduce adverse impacts on benthic habitats by exercising all reasonable and practicable means.

10-3 The Dredging, Marine Facilities and Pipeline Installation Environmental Monitoring and Management Program shall include:

- i. a set of management targets for zones of impact defined in the approved Marine Facilities and Impact Zones Plan which the proponent shall aim to achieve;

- ii. descriptions of monitoring sites in coastal waters and creeks, including key physical attributes, geographic locations and measures of the baseline condition indicators relevant to the benthic habitats to be monitored;
- iii. descriptions of the environmental variables to be monitored, and the monitoring and data evaluation procedures to be applied, for determining achievement of the environmental protection outcomes specified in condition 9 and management targets required by condition 10-3 above;
- iv. the monitoring methodologies to be applied so as to:
  - a. measure relevant physical indicators (e.g. water currents, water quality conditions including turbidity, photosynthetically active radiation and light attenuation coefficient, and sediment deposition rates) at a frequency to allow near-real time dredge and dredge overflow management and the validation and calibration of numerical models that may be used to assist in the management of dredging activities; and
  - b. routinely measure biological indicators to inform adaptive environmental management;
- v. management trigger indicators and values for relevant physical and biological indicators to be applied in a risk-based tiered approach for the management of the environmental impacts of turbidity generating activities which are part of the construction and maintenance of marine facilities;
- vi. evidence demonstrating that the monitoring required to assess achievement of the management targets required by condition 10-3 above, is based on tests using appropriate effect size(s) and has statistical power values, as approved by the CEO;
- vii. management actions that will be implemented in the event that the management trigger values required by condition 10-3 v are not met;
- viii. methods and procedures that will be implemented to regularly characterise, spatially-define and report the realised Zone of Influence caused by turbidity-generating activities which are part of the installation and maintenance of marine facilities; and
- ix. requirements for timely reporting of monitoring data, management responses and contingency measures.

10-4 The proponent shall advise relevant stakeholders of the opportunity to comment on a draft copy of the Dredging, Marine Facilities and Pipeline Installation Environmental Monitoring and Management Program and provide those stakeholders at least 14 days to comment on the plan before it is submitted to the CEO.

10-5 The proponent shall implement the Dredging, Marine Facilities and Pipeline Installation Environmental Monitoring and Management Program which meets the requirements specified in these conditions.

10-6 In the event that monitoring carried out under the approved Dredging, Marine Facilities and Pipeline Installation Environmental Monitoring and Management

Program determines that any of the environmental protection outcomes set in condition 9 are not being achieved by construction of the marine facilities, the proponent shall:

- i. immediately suspend all turbidity-generating activities which are part of the installation or maintenance of the marine facilities that are causing the non-achievement;
- ii. within 24 hours of that suspension, report the non-achievement to the CEO and that it has suspended all turbidity-generating activities which are part of the installation or maintenance of the marine facilities that are causing the non-achievement; and
- iii. within 48 hours of that suspension, report to the CEO:
  - a. the results of the monitoring that led to that suspension;
  - b. the findings of investigations into the status of relevant environmental measures against achievement of the environmental protection outcomes specified in condition 9;
  - c. the turbidity-generating activities which are part of the installation or maintenance of the marine facilities and metocean conditions occurring in the monitoring period prior to detecting the non-achievement of environmental protection outcomes set in condition 9; and
  - d. the results of the most recent water quality and sediment deposition monitoring.

10-7 If, after having complied with condition 10-6, in the report required by condition 10-6iii, the proponent:

- i. finds that all environmental protection outcomes specified in condition 9 are being achieved; or
- ii. provides compelling evidence that a particular turbidity generating activity did not cause the non-achievement;

and the CEO concurs with the findings of the proponent's report, then the CEO may authorise the proponent to recommence turbidity-generating activities which are part of:

- iii. the installation of marine facilities if condition 10-7 i applies; or
- iv. the installation of which-ever particular marine facilities that are determined not to have caused the non-achievement if condition 10-7ii applies, consistent with relevant management programs.

10-8 If conditions 10-7 iii and iv do not apply, and the proponent wishes to recommence the turbidity-generating activities which remain suspended under condition 10-6, the proponent:

- i. shall submit to the Minister an additional report detailing the following:
  - a. the results of the most recent environmental monitoring for all monitoring and reference sites, including identifying where an environmental protection outcome is not being achieved, and those

sites where there is compelling evidence that non-achievement of an environmental protection outcome is reasonably expected to be recorded as part of the same event;

- b. the turbidity-generating activities which were being undertaken in the monitoring period prior to the environmental protection outcome not being achieved and until the time of suspension;
  - c. the metocean conditions as monitored in the most recent monitoring period prior to the environmental protection outcome not being achieved and until the time of suspension;
  - d. the results of the most recent water quality and sediment deposition monitoring;
  - e. proposed revised Zone of High Impact and Zone of Moderate Impact, including spatial data in a format compatible with a Geographical Information System specified by the CEO that defines the locations of all infrastructure and proposed revised zones of impact and influence consistent with the requirements of condition 9-3; and
  - f. any other information considered relevant by the proponent in support of its Proposal to recommence all turbidity-generating activities that remain suspended after implementing condition 10-6.
- ii. shall, if an environmental protection outcome (or any approved revised environmental protection outcome) is not being achieved outside the Zones of Moderate Impact (not including the Zone of High Impact), include in the report required by condition 10-6iii, additional management actions proposed to be implemented so that the recommencement of turbidity-generating activities which are part of the construction or maintenance of the marine facility:
- a. will not cause non-achievement of an environmental protection outcome for the Zone of High Impact and Zone of Moderate Impact as set out in the approved Marine Facilities and Impact Zones Plan or a revised Zone of High Impact and Zone of Moderate Impact proposed by the proponent in condition 10-8 i; and
  - b. will ensure the environmental protection outcomes set in condition 9 continue to be achieved.

10-9 The Minister may, having regard to the report submitted by the proponent under condition 10-8 and on the advice of the Chairman of the EPA, approve a revised Zone of High Impact or Zone of Moderate Impact to have effect for the purpose of conditions 9-5 and 9-6 in which case the proponent may then recommence turbidity-generating activities which are part of installation or maintenance of marine facilities subject to the approved revised Zone of High Impact and Zone of Moderate Impact. The Minister may also, having regard to the reports submitted by the proponent under condition 10-6iii and condition 10-8, require the proponent to implement the additional management actions proposed in condition 10-8ii above, or other additional management actions, as part of the approved Dredging, Marine Facilities and Pipeline Installation Environmental Monitoring and Management Program required by condition 10-1.



10-10 If under condition 10-9 any revised Zone of High Impact or Zone of Moderate Impact is approved, or additional management actions are required to be implemented, those approved revised zones and additional management actions required by the Minister under condition 10-9 shall have effect as if they were part of the approved Marine Facilities and Impact Zones Plan and the approved Dredging, Marine Facilities and Pipeline Installation Environmental Monitoring and Management Program.

## **11 State of the Marine Environment Surveys**

11-1 The proponent shall, at least three months prior to the commencement of any marine works that may impact the marine environment, prepare and submit to the CEO a scope of works for surveys of the marine environment (Scope of Works for Marine Surveys). The CEO, on advice from the Department of Fisheries (DoF), is to determine whether the Scope of Works for Marine Surveys submitted meets the requirements of these conditions and is to notify the proponent accordingly.

11-2 The surveys of the marine environment are to be conducted in accordance with the Scope of Works for Marine Surveys at the times indicated below:

- i. the baseline state of the marine environment survey is to be completed prior to the commencement of any marine works;
- ii. the mid-term state of the marine environment survey is to be undertaken at the mid-term of the marine works period associated with the construction of any marine facilities;
- iii. the first post-development state of the marine environment survey is to be undertaken within three months of completion of each construction phase associated with the construction of any marine facilities; and
- iv. a second post-development state of the marine environment survey shall be undertaken having regard to the findings of previous surveys.

Note: The proponent at the time responsible for the relevant marine works that trigger condition 11-1 will be responsible for the repeat surveys.

11-3 The Scope of Works for Marine Surveys for Marine Surveys shall include the following where relevant:

- i. Procedures and methods for the collection of quantitative environmental data for:
  - a. water quality;
  - b. hydrodynamic conditions including direction and velocity of water currents;
  - c. the physical characteristics of native sediments and development-influenced sediments suspended in the water column and deposited on the benthos;

- d. the natural and development-influenced rates, and spatial and temporal patterns of sediment deposition;
  - e. the spatial extent, distribution, biotic community composition (at a suitable taxonomic resolution to differentiate different communities), natural variability including seasonality and condition of benthic habitats; and
  - f. the preparation of benthic habitat maps showing the extent, distribution of benthic habitats and condition of benthic habitats at representative sites.
- ii. timing for the implementation and completion of the surveys having regard to the types and sequence of surveys referred to in condition 11-2;
  - iii. procedures for the use of survey data to assess achievement of the marine environmental protection outcomes set out in conditions 9-5 and 9-6; and
  - iv. timing and frequency of reporting.

11-4 Prior to the commencement of marine works and in accordance with the approved Scope of Works for Marine Surveys, the proponent shall undertake the baseline state of the marine environment survey.

11-5 At the time specified in the approved Scope of Works for Marine Surveys and in accordance with the approved Scope of Works for Marine Surveys, the proponent shall undertake the surveys for the state of the marine environment at the mid-term of the marine works.

11-6 At the time specified by the approved Scope of Works for Marine Surveys and in accordance with the approved Scope of Works for Marine Surveys, the proponent shall undertake the post-development surveys for the state of the marine environment at the completion of the marine works.

11-7 No longer than five years following completion of marine works required for the construction of marine facilities and in accordance with the approved Scope of Works for Marine Surveys, the proponent shall undertake a second post-development state of the marine environment survey to determine achievement of the marine environmental protection outcomes set out in conditions 9-5 and 9-6.

11-8 The proponent shall report the findings of the baseline state of the marine environment survey required by condition 11-4 to the CEO within six months of having completed that survey.

11-9 The proponent shall report the findings of subsequent state of the marine environment surveys required by conditions 11-5, 11-6 and 11-7 and include in each report an appraisal of the degree of conformance with environmental protection outcomes set in conditions 9-5 and 9-6 and an appraisal of the achievement of the management targets set in condition 10-3, having regard to any relevant approved revised Zone of High Impact and Zone of Moderate Impact, to the CEO within four months of having completed each survey.

## **12 Coastal Processes Monitoring and Management Program**

12-1 The proponent shall ensure that installation and operation of the nearshore marine facilities achieve the following outcomes as measured under the Coastal Processes Monitoring and Management Program required by condition 12-3:

- i. no significant changes to littoral sediment transport under non-cyclonic conditions;
- ii. no significant changes in erosion trend under non-cyclonic conditions or in the position of the mean sea level shoreline and dune vegetation line north and south of the nearshore marine facilities;
- iii. no significant impacts on the recreational value of beaches north and south of the nearshore marine facilities;
- iv. no significant impact on heritage sites north and south of the nearshore marine facilities.

12-2 The proponent shall not commence installation of the nearshore marine facilities prior to:

- i. submitting a Coastal Processes Monitoring and Management Program to the CEO, and
- ii. receiving written notice from the CEO, having consulted with the Department of Transport (DoT) (Maritime Planning Division), that the Coastal Processes Monitoring and Management Program meets the requirements of these conditions.

12-3 The Coastal Processes Monitoring and Management Program shall include:

- i. quarterly site inspection of beach and dune conditions for at least 5 kilometres north and south of the nearshore marine facilities;
- ii. quarterly measurement of beach and dune width and height using a combination of topographic surveys and aerial photography or satellite imagery;
- iii. quarterly recording of beach profile using on-ground photography;
- iv. annual hydrographic survey of the near-shore area;
- v. a community liaison strategy to obtain feedback on impacts on recreational values;
- vi. culturally appropriate annual review and investigation of heritage locations to assess the condition and potential threats to Aboriginal and natural heritage locations;
- vii. a table showing the type of monitoring and monitoring frequency for each of the coastal features to be protected under condition 12-1;
- viii. management triggers relevant to achieving the outcomes specified in condition 12-1; and

- ix. management actions (for example, active sand bypass) that will be implemented in the event that management triggers are or are likely to be exceeded.

12-4 The proponent shall implement the Coastal Processes Monitoring and Management Program which meets the requirements of these conditions.

12-5 The proponent shall report any non-achievement of the management triggers referred to in condition 12-3, along with measures taken and proposed to be taken, and strategies to be implemented in response to the non-achievement, to the CEO within 21 days of the non-achievement being identified.

### **13 Marine Environmental Quality and Marine Outfalls**

13-1 The proponent shall not discharge to the marine environment from any facility, or install any infrastructure for this Proposal related to waste water discharge prior to:

- i. submitting a Port Environmental Quality Management Program to the CEO, and
- ii. receiving written notice from the CEO, having consulted with DoF and the relevant Port Authority, that the Port Environmental Quality Management Program meets the requirements in this condition.

13-2 The Port Environmental Quality Management Program shall:

- i. spatially define all port infrastructure, discharge infrastructure (including by reference to maps) and the areas referred to below consistent with condition 9-3;
- ii. show a Moderate Ecological Protection Area (MEPA) extending to no further than 250 m from inner Port Facilities, including the shipping berths and ship turning basin and the area enclosed by breakwaters and the Integrated Marine Facility, but excluding the shipping channel;
- iii. show a High Ecological Protection Area (HEPA) outside the MEPA and including the Shipping Channel Area;
- iv. require all port-related activities and wastewater discharges to be managed with the objective of achieving a level of environmental quality such that all Environmental Values defined in Schedule 3 are protected within the Port Area and any other areas influenced by port activities except in treated sewage mixing zones;
- v. define the environmental quality guidelines and standards that apply to the HEPA, MEPA and Low Ecological Protection Area (LEPA) and are to be used as benchmarks for assessing environmental performance against the ecological protection objectives, consistent with Schedule 4 attached to this Statement;
- vi. include a regular environmental performance monitoring and reporting schedule; and

- vii. provide spatial data in a format compatible with a Geographical Information System acceptable to the CEO.
- 13-3 Wastewater treatment and wastewater discharge infrastructure must comply with contemporary best practice principles including modelling based on a specific port design, diffuser performance, effluent characteristics and toxicity, ambient water quality conditions and specific mitigation measures.
- 13-4 The proponent must only discharge wastewater to the marine environment through purpose-built outfalls and diffusers, and locate all waste water discharge outfalls so that their associated Low Ecological Protection Areas are entirely contained within the Moderate Ecological Protection Area of the Port.
- 13-5 The Low Ecological Protection Area for any wastewater discharges must not extend beyond 70 metres from any point of the diffuser structure.
- 13-6 The proponent shall ensure that all wastewater discharges, singly and in combination, are managed to achieve the environmental quality objectives and levels of ecological protection as identified through Condition 13-2 and described in Schedules 3 and 4.
- 13-7 The proponent's application for a works approval under Part V of the Act for any discharge from the terrestrial facilities shall include a report, developed in consultation with the DEC, that:
- i. spatially maps the areas where each environmental quality objective and level of ecological protection is to be achieved;
  - ii. identifies the environmental quality criteria, for constituents of the discharge considered relevant by the DEC, that should be achieved to maintain the environmental quality objectives and levels of ecological protection established through condition 13-2;
  - iii. predicts the toxicity of the final discharge under typical conditions;
  - iv. predicts the number of dilutions necessary to meet the required environmental quality objectives and level of ecological protection. That is, a moderate level of protection at the boundary between a Low and Moderate Ecological Protection Area and a high level of protection at the boundary between a Moderate and High Ecological Protection Area; and
  - v. presents contingency options for additional treatment or modifying the diffuser to achieve greater dilutions if environmental quality objectives or levels of ecological protection are not being met.
- 13-8 The proponent's application for a works approval under Part V of the Act for any operational discharge from the terrestrial facilities—shall include an Effluent Quality Validation and Reporting Program, developed in consultation with the DEC, that addresses the following issues:
- i. a Whole Effluent Toxicity Testing program for determining:

- a. the actual toxicity of any discharge post commissioning and post operation of the outfall and following any significant change in effluent composition; and
- b. the number of dilutions required to achieve each relevant level of ecological protection.

Testing is to be undertaken on a minimum of five locally relevant biota species from four different taxonomic groups using the recommended protocols from ANZECC and ARMCANZ (2000)<sup>1</sup>;

- ii. characterisation of any waste water discharge under typical operational conditions and after any significant changes in effluent composition;
- iii. a revised set of environmental quality criteria based on the contaminants considered relevant by the DEC identified from condition 13-7ii;
- iv. the number of dilutions required to achieve the environmental quality objectives and levels of ecological protection identified in condition 13-2 and described in Schedule 4 based on the results from conditions 13-8i, ii and iii; and
- v. reporting to the DEC within six months of commissioning of a discharge or within six months of any significant change in composition of a discharge, including any management actions necessary to ensure ongoing compliance with the environmental quality objectives and levels of ecological protection established through condition 13-2 and described in Schedules 3 and 4.

13-9 In the event that the monitoring and reporting required by conditions 13-1, 13-7 and 13-8 or through the discharge licences issued under Part V of the EP Act indicates that the environmental quality objectives and levels of ecological protection established through conditions 13-2 and 13-7, and described in Schedules 3 and 4, are not being met, or are not likely to be met, the proponent shall report the findings to the CEO and the DEC as soon as practicable, but within five working days, along with a description of the management actions to be taken to meet the required level of ecological protection.

## **14 Pipeline Shore Crossing Management and Monitoring Program**

14-1 The installation of pipeline shore crossings shall not cause direct or indirect disturbance to the surface of the land or the surface of the seabed in the intertidal zone and adjacent coastal strip unless the proponent demonstrates to the CEO's satisfaction that some disturbance to the surface of the land or the seabed in the intertidal zone and adjacent coastal strip is unavoidable having regard to available technology, the geology of the land and the geology of the seabed in the Pipeline Corridor.

14-2 The proponent shall not commence construction of any pipeline shoreline crossing prior to:

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<sup>1</sup> ANZECC and ARMCANZ (2000) Australian and New Zealand Guidelines for Fresh and Marine Water Quality, Report 4, National Water Quality Management Strategy.

- i. submitting a Pipeline Shoreline Crossing Management and Monitoring Program, for the management of pipeline shoreline crossing activities, to the CEO; and
- ii. receiving written notice from the CEO that the Pipeline Shoreline Crossing Management and Monitoring Program meets the requirements in this condition.

14-3 The proponent shall consult with the DEC, DoF, DoT and the Department of Mines and Petroleum (DMP) in the preparation of the Pipeline Shoreline Crossing Management and Monitoring Program.

14-4 The objectives of the Pipeline Shoreline Crossing Management and Monitoring Program are to:

- i. avoid impacts to fossilised dinosaur footprints in the intertidal zone;
- ii. minimise impacts to intertidal benthic habitats, coastal landforms and vegetation and Monsoon Vine Thicket vegetation;
- iii. avoid significant adverse environmental impacts from the disturbance of acid sulfate soils; and
- iv. avoid significant adverse environmental impacts from hydrotesting water or groundwater discharged as a result of the proposal.

14-5 The Pipeline Shoreline Crossing Management and Monitoring Program, shall include:

- i. in the event that the proponent asserts that it is not practicable to avoid direct or indirect disturbance to the surface of the land or the seabed in the intertidal zone and adjacent coastal strip when installing a pipeline shoreline crossing, an analysis and comparison of different methods for the installation of the pipeline shore crossing. The analysis and comparison must identify the methods (including tunnelling and other trenchless technologies), the likely direct and indirect disturbance to the surface of the land or the seabed in State waters, the intertidal zone and adjacent coastal strip resulting from the use of that technology and a justification for the preferred alternative method;
- ii. management measures to reduce the impacts from pipeline shoreline crossing activities, in particular with regard to fossilised dinosaur footprints, the marine environment, acid sulfate soils and coastal landforms and vegetation including Monsoon Vine Thicket, as far as practicable;
- iii. management measures to ensure that pipeline installation and pipeline shoreline crossing activities do not cause Material or Serious Environmental Harm in the intertidal zone and adjacent coastal strip comprising the area between the Lowest Astronomical Tide mark and the eastern extent of Monsoon Vine Thicket vegetation as depicted in Figure 2 or in State waters;
- iv. management measures to avoid, minimise and treat discharges to ensure that hydrotest water or groundwater discharges do not cause Material or

Serious Environmental Harm in the intertidal zone and adjacent coastal strip comprising the area between the Lowest Astronomical Tide mark and the eastern extent of Monsoon Vine Thicket vegetation as depicted in Figure 2 or in State waters; and

- v. performance standards against which achievement of the objectives of this condition can be determined.

14-6 The methods and measures required by conditions 14-5 i and ii shall address:

- i. management, treatment and disposal of drill cuttings and fluids returned to the surface by circulation to prevent pollution;
- ii. the generation and dispersion of turbidity associated with any discharge of drill cuttings and fluids to the marine environment;
- iii. dewatering of trenches or other discharges of groundwater;
- iv. management, treatment and disposal via an appropriate diffuser of hydrotest water;
- v. preventing adverse environmental impacts from acid sulfate soils;
- vi. noise and percussion;
- vii. direct and indirect disturbance of habitat;
- viii. preventing harm to, or fatalities of marine vertebrates;
- ix. the use of low toxicity polymer drilling fluids or water based fluids unless otherwise authorised by the Minister; and
- x. a marine monitoring program to detect changes to ecological elements outside the Zone of High Impact associated with the pipeline corridor.

14-7 The proponent shall implement the Pipeline Shoreline Crossing Management and Monitoring Program which meets the requirements in these conditions.

## **15 Marine Fauna Interaction – Marine Pile-driving, Dredging and Marine Construction Vessels and Light Sources**

15-1 The proponent shall engage dedicated Marine Fauna Observers who must:

- i. demonstrate a knowledge of marine wildlife species in the Kimberley region, including Threatened and Migratory Species listed under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999*, and their behaviours;
- ii. be on duty on vessels actively engaged in pile-driving or dredging during all daylight hours when pile-driving operations or dredging are conducted; and
- iii. maintain a log of:
  - a. their observations of cetaceans in a format consistent with the National Cetacean Sightings and Strandings Database;



- b. their observations of other marine fauna, including injured or dead fauna noted within 500 metres of the vessels referred to in 15-1 ii above;
- c. their observations of fauna behaviours, in particular any behaviours that could be interpreted as a display of disturbance or distress;
- d. management responses by the proponent in relation to any observation of disturbed or distressed fauna, and injured or dead fauna; and
- e. observation hours and the duration of the pile-driving or dredging activity.

15-2 The proponent shall within six months of completing pile-driving operations, lodge cetacean records with the National Cetacean Sighting and Strandings Database at the Australian Antarctic Division and with the DEC.

15-3 At least one member of the crew on each vessel undertaking construction activities will be trained in marine fauna observations and mitigation measures, including the requirements of the Wildlife Conservation (Closed Season for Marine Mammals) Notice 1998, as amended or replaced from time to time, and shall maintain a log of fauna observed during transit within the Marine Project Area and construction activity during daylight hours consisting of GPS coordinates, species (if known), and behaviour. Logs are to be submitted to the DEC on an annual basis at the same time as submitting the compliance assessment report required by condition 4-2 to the CEO.

15-4 Vessels engaged in construction of the marine facilities or pipelines shall not exceed those speeds specified in the Conservation Significant Marine Fauna Interaction Management Program required under condition 15-10 or a speed designated by the DoT or relevant Port Authority, whichever is the lesser.

15-5 Subject to condition 15-9, no marine pile-driving operations shall commence until the Marine Fauna Observer (or observers) required by condition 15-1 have verified that no cetaceans or dugongs have been observed within a radius of 1500 metres or marine turtles within a radius of 300 metres from the planned pile-driving operation during the 30 minute period immediately prior to commencement of pile-driving operations.

15-6 Prior to commencement of full power marine pile-driving, the proponent shall implement soft start-up procedures that slowly increase the intensity of noise emissions over a period of no less than 15 minutes.

15-7 If the Marine Fauna Observer(s) required by condition 15-1, or any other person, observes a marine turtle within 100 metres of a marine pile-driving operation, or cetacean or dugong within 500 metres of a marine pile-driving operation, the marine pile-driving operation within 100 metres of a marine turtle or 500 metres of the cetacean or dugong is to be suspended.

15-8 Marine pile-driving that has been suspended in accordance with condition 15-7 shall not recommence until the cetacean or dugong has moved beyond 1500

metres from the suspended marine pile-driving operation or the marine turtle beyond 300 metres from the suspended marine pile-driving operation or the cetacean, dugong or marine turtle has not been observed within the exclusion zone for a period of no less than 30 minutes. Marine pile-driving that has been suspended for more than 15 minutes shall recommence with soft start-up procedures as required by condition 15-6.

15-9 No marine pile-driving operations or start up of marine pile driving operations shall occur between the hours of sunset and sunrise during June to the end of November in any year, unless the proponent demonstrates to the satisfaction of the CEO on the advice of the DEC that the noise impacts can be managed under the Conservation Significant Marine Fauna Interaction Management Program.

15-10 The proponent shall not commence any works associated with the marine facilities and pipelines that may impact on the marine environment or terrestrial facilities prior to:

- i. submitting a Conservation Significant Marine Fauna Interaction Management Program to the CEO, and
- ii. receiving written notice from the CEO, having consulted with DEC and the Department of Sustainability, Environment, Water, Population and Communities (SEWPaC), that the Conservation Significant Marine Fauna Interaction Management Program meets the requirements of these conditions.

15-11 The objective of the Conservation Significant Marine Fauna Interaction Management Program is to ensure that the proponent constructs and operates the marine facilities, pipelines and terrestrial facilities so as to:

- i. detect; and
- ii. avoid, or where avoidance is not practicable, mitigate impacts upon conservation significant marine fauna, from construction and operation of marine facilities, pipelines and terrestrial facilities.

Note: For the purposes of this condition the term 'conservation significant marine fauna' includes marine mammals, marine turtles, whale sharks and sawfish.

15-12 The proponent shall include the following in the Conservation Significant Marine Fauna Interaction Management Program:

- i. a description of the environmental stressors relating to the construction and operation of near-shore and offshore marine facilities, pipelines and terrestrial facilities which are likely to impact on marine fauna. (environmental stressors may include, but are not limited to, noise, vibration, light spill and glow, vessel strike, dredge entrainment, marine discharges and changes to coastal processes with the potential to impact on important marine fauna habitats);
- ii. a description of design features and management actions which the proponent will implement to avoid, or where this is not practicable, mitigate impacts of the environmental stressors relating to the construction and operation of near-shore and offshore marine facilities, pipelines and

terrestrial facilities on conservation significant marine fauna (for example, darkness strategies that avoid, or where this is not practicable, limit the impact of lights or light glow from the construction and operations of the Proposal, vessels and any other equipment, likely to interfere with female turtles and hatchlings);

- iii. robust baseline data on acoustic noise associated with development;
- iv. a study of the impacts of significant marine noise sources on acoustic communication between Indo-Pacific humpback dolphins and their ability to maintain a cohesive group as a result of marine noise;
- v. mapping of the cumulative noise levels from all significant marine noise sources associated with the proposal such as pile driving, blasting, dredging, construction and maintenance ships, barges, rock dumping vessels, and drilling in order to gauge total noise levels on top of ambient noise levels in the marine environment;
- vi. development of noise management procedures for all significant marine noise sources associated with the proposal including pile driving, blasting, dredging, construction and maintenance ships, barges, rock dumping vessels, and drilling;
- vii. determination of specific marine fauna management zones;
- viii. avoidance of impacts to marine mammals consistent with the *Wildlife Conservation (Close Season for Marine Mammals) Notice 1998*;
- ix. designation of vessel corridors that avoid to the fullest extent practicable critical habitat for dugongs, marine turtles and cetaceans specially protected under the *Wildlife Conservation Act 1950*;
- x. environmental performance standards to determine whether the design features and management actions are achieving the objectives referred to in condition 15-11; and
- xi. a process (including a monitoring programme) to determine that the environmental performance standards are being met.

15-13 The proponent shall implement the Conservation Significant Marine Fauna Interaction Management Program which meets the requirements of these conditions.

15-14 The proponent shall review annually the approved Conservation Significant Marine Fauna Interaction Management Program in consultation with the DEC and SEWPaC and implement any changes approved by the CEO.

15-15 The proponent shall report to:

- i. the CEO any non-achievement of the environmental performance standards referred to in condition 15-12iii within 21 days of it having determined non-achievement and its recommendations as to how the program should be amended to ensure standards are achieved.

- ii. the DEC any natural or Proposal attributable injury or mortality of conservation significant marine fauna within 24 hours of the observation of an injury or mortality.

15-16 The proponent shall not commence marine pile driving activities prior to:

- i. submitting to the CEO an Underwater Noise Monitoring and Review Program which has been prepared and designed in consultation with DEC, SEWPaC and following the advice of an independent expert(s) in the field of noise propagation modelling in the marine environment, and
- ii. receiving written notice from the CEO, having consulted DEC, that the Underwater Noise Monitoring and Review Program meets the requirements in these conditions.

15-17 The Underwater Noise Monitoring and Review Program shall include programs to:

- i. measure underwater noise from pile-driving operations to establish a library of sound signals:
  - a. at varying distances from the noise source;
  - b. when driving piles of different sizes and types;
  - c. during the concurrent pile-driving of different numbers of piles;
  - d. in conditions of different water depths; and
  - e. in different pile-driving conditions (substrate types).
- ii. review the predictive capacity of the noise propagation model used for the pile-driving and make recommendations for improving the accuracy of underwater noise modelling in the future and the management of noise emitting activities as provided for by condition 15.

15-18 The proponent shall implement the Underwater Noise Monitoring and Review Program which meets the requirements in these conditions.

15-19 The results of the approved Underwater Noise Monitoring and Review Program are to be published within one year after the completion of the pile-driving operations in a manner approved by the CEO and a copy provided to the DEC and SEWPaC.

## **16 Marine Drilling and Blasting Activities**

16-1 The proponent shall not commence marine drilling or blasting activities which are part of the construction of the marine facilities prior to:

- i. submitting a Drilling and Blasting Management Program to the CEO, and
- ii. receiving written notice from the CEO, having consulted DEC, DoT (Marine Division), DoF and SEWPaC, that the Drilling and Blasting Management Program meets the requirements in condition 16.

16-2 The objectives of the Drilling and Blasting Management Program are to ensure that drilling and blasting activities which are part of the construction of the marine facilities are managed to minimise adverse impacts on all marine fauna.

16-3 The Drilling and Blasting Management Program shall include:

- i. a description of the geographical location and duration of drilling and blasting required;
- ii. a description of likely blast pressures and potential environmental impacts of these pressures;
- iii. management actions to avoid or minimise environmental impacts. The management actions shall include:
  - a. actions for the disposal of drilling mud;
  - b. avoidance of marine blasting and drilling activities at night during the peak southern migration of mother and calf Humpback whale pods defined as June to November in any year and in seasonally sensitive periods for other marine fauna as far as practicable; and
  - c. establishment of observation zones depending on predicted and received noise levels to ensure impacts on cetaceans, dugongs and turtles are minimised as far as practicable.
- iv. management actions for dead and injured wildlife;
- v. stakeholder communication; and
- vi. reporting procedures and time frames.

16-4 In the event that marine drilling and blasting is required, the proponent shall implement the Drilling and Blasting Management Program which meets the requirements in condition 16.

## **17 Introduced Marine Pests**

17-1 The Proponent shall manage non-trading vessel and immersible equipment activities whilst engaged for the construction, operation, maintenance and decommissioning of the Proposal so as to prevent the introduction of Introduced Marine Pests into and within State waters.

17-2 Prior to any non-trading vessels or immersible equipment entering the Zone of Moderate Impact as defined by condition 9-6, the proponent shall prepare an Introduced Marine Pest Risk Assessment Procedure to the satisfaction of the CEO in consultation with the DoF which includes but is not limited to the following:

- i. all factors to be considered in the risk assessment;
- ii. limits for unacceptable risk of introducing an Introduced Marine Pest;
- iii. a tool for performing Introduced Marine Pest Risk Assessments; and
- iv. measures to be implemented to reduce risks to an acceptable level, where the risk assessment identifies an unacceptable risk.

- 17-3 The proponent shall ensure that any non-trading vessel or immersible equipment is subject to an Introduced Marine Pest Risk Assessment, prior to entering or demobilising from the Marine Project Area, in accordance with the Introduced Marine Pest Risk Assessment Procedure approved pursuant to condition 17-2.
- 17-4 The proponent shall ensure that any Introduced Marine Pest Risk Assessment undertaken pursuant to condition 17-3 is recorded and that record is provided to the DoF within seven days of the Introduced Marine Pest Risk Assessment being undertaken.
- 17-5 The proponent shall ensure that any non-trading vessel or immersible equipment that poses an unacceptable risk, as defined by the limits identified under condition 17-2ii, of introducing Introduced Marine Pests, as determined by an Introduced Marine Pest Risk Assessment undertaken pursuant to condition 17-3, does not enter the Marine Project Area.
- 17-6 Prior to any non-trading vessel or immersible equipment entering the Marine Project Area, the proponent shall prepare an Introduced Marine Pests Monitoring Program to the satisfaction of the CEO in consultation with the DoF that:
- i. is consistent with monitoring design, implementation and reporting standards as set out in the *National System for the Prevention and Management of Marine Pest Incursions (Marine Intergovernmental Agreement, April 2005)*;
  - ii. includes a minimum monitoring frequency of once per year; and
  - iii. requires opportunistic sampling and analysis of specimens removed during port, vessel and immersible equipment monitoring activities.
- 17-7 The proponent shall implement the Introduced Marine Pests Monitoring Program approved pursuant to condition 17-6, or amended versions approved by the CEO for the life of the Proposal, prior to any entry to the Marine Project Area by a non-trading vessel or immersible equipment.
- 17-8 The proponent shall provide the results of monitoring undertaken pursuant to condition 17-7 to the CEO and the DoF annually.
- 17-9 Prior to any non-trading vessel or immersible equipment entering the Marine Project Area, the proponent shall prepare an Introduced Marine Pests Management Strategy to the satisfaction of the CEO in consultation with the DoF, to prevent wherever practicable, the establishment and proliferation of any Introduced Marine Pest, aiming to control and potentially eradicate that Introduced Marine Pest, and to minimise the risk of that Introduced Marine Pest being transferred to other locations within Western Australia.
- 17-10 The proponent shall notify the CEO, DoF and any relevant Port Authority:

- i. within 24 hours following initial detection of a suspected Introduced Marine Pest; and
- ii. within 24 hours following subsequent analysis and confirmation of species identification of the suspected Introduced Marine Pest.

17-11 In the event that any Introduced Marine Pest is suspected or detected, the proponent shall, in consultation with the DoF and the CEO implement the Introduced Marine Pests Management Strategy.

17-12 The proponent is to submit a report detailing the outcomes of any implementation of the Introduced Marine Pests Management Strategy to the DoF and the CEO within 30 days of the commencement of the implementation of the Introduced Marine Pests Management Strategy and thereafter as required by the CEO in consultation with the DoF.

## **18 Surface and Groundwater Management and Monitoring**

18-1 The proponent shall not commence ground disturbing activities or develop or construct a borefield prior to:

- i. submitting a Surface and Groundwater Management and Monitoring Program to the CEO, and
- ii. receiving written notice from the CEO, having consulted the Department of Water (DoW), that the Surface and Groundwater Management and Monitoring Program meets the requirements of these conditions.

18-2 The objectives of the Surface and Groundwater Management and Monitoring Program are to ensure that:

- i. the proponent demonstrates that groundwater is required for that particular phase of the implementation of the Proposal and that Environmental Harm associated with commissioning of a borefield, including clearing of native vegetation has been avoided where practicable, or minimized where avoidance is not possible and does not exceed the limitations/extent of clearing related to the development of the borefield provided for in Column 3 of Table 1;
- ii. groundwater abstraction, construction and operation of any facilities and use of groundwater within of the Browse LNG (BLNG) Precinct (including construction and operation of port related facilities or pipelines) do not adversely affect surface and groundwater quality and vegetation dependent on groundwater or surface water flows, including the Monsoon Vine Thicket and Drainage Basin vegetation communities; and
- iii. changes in the routing, availability and quality of surface waters do not adversely affect Monsoon Vine Thicket or Drainage Basin vegetation.

18-3 In seeking approval for the Surface and Groundwater Management and Monitoring Program, the proponent shall provide to the CEO the following information:

- i. monitoring data approved by the CEO for groundwater levels; surface and ground water quality in and around the Monsoon Vine Thicket and Drainage Basin communities;
- ii. monitoring data approved by the CEO for soil moisture levels in the root zone within the Monsoon Vine Thicket and Drainage Basin communities;
- iii. monitoring data approved by the CEO for the health, cover and composition of vegetation within the Monsoon Vine Thicket and Drainage Basin communities; and
- iv. an endorsement from a suitably qualified independent specialist that the monitoring undertaken and the Surface and Groundwater Management and Monitoring Program meets contemporary best practice standards and will ensure condition 18 will be met.

18-4 The Surface and Groundwater Management Monitoring Program must include the following:

- i. a monitoring program development in consultation with DoW which is to continue until the Proposal is decommissioned, or until such time as the CEO determines that monitoring and management actions may cease.
- ii. appropriate trigger values, developed to the satisfaction of the CEO on advice from the DoW and the DEC to be applied to the monitoring undertaken which will provide an indication of any decline in condition or change in composition of vegetation, including Monsoon Vine Thicket and Drainage Basin vegetation communities as a result of changes in levels, flows or quality of groundwater or surface waters;
- iii. justification for the selection of the trigger levels;
- iv. a detailed management strategy developed to the satisfaction of the CEO on advice from the DoW and the DEC to avoid and mitigate any environmental harm to the Monsoon Vine Thicket and Drainage Basin communities detected by the monitoring program required by condition 18-4i;
- v. identification of the terrestrial facilities' design features, management measures and protocols, to be implemented by the proponent, which will ensure that all stormwater (including rainwater and water generated within the Terrestrial Disturbance Footprint), if discharged outside the Terrestrial Disturbance Footprint, will:
  - a. not cause pollution; and
  - b. be consistent with the pre-development run-off regime (for example, maintain the same groundwater recharge; ponding and streaming patterns);
- vi. development of a groundwater model and verification of the groundwater model against actual data collected; and
- vii. recalibration of the model and implications of any deviation from the model on the Monsoon Vine Thicket and Drainage Basin vegetation communities.



18-5 The proponent shall implement the Surface and Groundwater Management Monitoring Program which meets the requirements of these conditions.

18-6 In the event that monitoring indicates an exceedance of the trigger levels determined, the proponent shall:

- i. immediately implement mitigation measures;
- ii. report to the CEO, within 14 days of the exceedances being identified, on the following matters:
  - a. mitigation measures taken;
  - b. evidence which allows determination of the cause of the exceedances and if the exceedance is project attributable submit actions to be taken including those required to be included in the Surface and Groundwater Management Monitoring Program.

## **19 Weeds**

19-1 The proponent shall ensure that:

- i. no new species or outbreaks of weeds are introduced into the BLNG Precinct as a direct or indirect result of the implementation of the Proposal;
- ii. existing weeds are controlled so that their distribution does not increase in the vicinity of the BLNG Precinct and surrounding buffer zones;
- iii. prior to ground disturbing activities, unless otherwise approved by the CEO, the proponent shall undertake a baseline weed survey to determine the species and extent of weeds present at weed monitoring sites within 50 metres of the outer boundary of each terrestrial element of the BLNG Precinct and at least three reference sites on nearby undisturbed land beyond 200 metres from the BLNG Precinct disturbance footprint in consultation with the DEC;
- iv. baseline and reference weed monitoring sites surveyed as required by condition 19-1, except those adjacent to common-user facilities, are to be monitored every 2 years for the life of the proposal to determine whether changes in weed cover and type within 50 metres of the BLNG Precinct disturbance footprint have occurred and are likely to have resulted from implementation of the proposal or from broader regional changes;
- v. baseline and reference weed monitoring sites adjacent to common-user facilities are required to be monitored every 2 years up until the proponent has provide written notice to the EPA that is ceases to have responsibility for the common-user facilities; and
- vi. if the results of monitoring under condition 19-1 indicate that adverse changes in weed cover and type within 50 metres of the BLNG Precinct are attributable to the implementation of the proposal, the proponent shall report the monitoring findings to the DEC within 3 months of completion of the monitoring and shall immediately undertake weed control and rehabilitation in the affected areas, where Proposal attributable weed

cover has adversely changed, using native flora species of local provenance.

## **20 Rehabilitation**

20-1 The proponent shall undertake progressive rehabilitation of areas temporarily disturbed by construction and operation of terrestrial facilities for the duration of the construction and operation of terrestrial facilities to ensure the following outcomes are achieved:

- i. the percentage cover and species diversity of living self sustaining native vegetation meet the completion criteria approved by the CEO under condition 20-2iii;
- ii. no species of weeds are introduced into the rehabilitated areas;
- iii. the cover of weeds in rehabilitated areas shall not exceed the lesser of:
  - a. that identified in the baseline weed survey in condition 19-1; or
  - b. that existing on comparable nearby land which has not been disturbed during implementation of the Proposal or previously.

20-2 The proponent shall:

- i. prior to any ground disturbing activities, unless otherwise approved by the CEO, conduct surveys of each of the vegetation communities that are likely to be impacted by construction and operation of terrestrial facilities to collect adequate information to assist setting completion criteria for rehabilitation;
- ii. prepare and submit for the approval of the CEO, on advice from the DEC, the methodology of the survey required in condition 20-2i;
- iii. within 18 months of having completed the surveys referred to in condition 20-2i, unless otherwise approved by the CEO, develop rehabilitation completion criteria which are comparable to sites undisturbed by the proposal or other activities to be approved by the CEO on advice from the DEC; and
- iv. commence rehabilitation of areas temporarily disturbed by construction and operation of terrestrial facilities within six months of the completion of the temporary disturbance.

20-3 The proponent shall progressively monitor the rehabilitation for a range of sites against the completion criteria developed and approved pursuant to condition 20-2iii with appropriately timed surveys as agreed with the DEC, until the completion criteria are met and sustained for a period of not less than five years. The monitoring shall be conducted annually unless otherwise agreed by the CEO, on advice from the DEC.

20-4 The proponent shall include the results of the rehabilitation monitoring required pursuant to condition 20-3 in the compliance assessment report referred to in condition 4-2. The report shall address the following:

- i. the progress made towards meeting the completion criteria developed pursuant to condition 20-2iii; and
- ii. contingency management actions if the monitoring required by condition 20-3 indicates that the completion criteria required by condition 20-2iii are unlikely to be met or sustained.

## **21 Emissions to Air**

21-1 The proponent shall install equipment and manage ongoing operations such that contemporary best practice for an LNG plant is achieved for environmental and amenity protection with respect to:

- i. minimising emissions including those of benzene, toluene, ethylbenzene, xylene (collectively known as BTEX), other volatile organic compounds, hydrogen sulphide, oxides of nitrogen, sulfur dioxide and carbon monoxide;
- ii. ensuring that public access to areas outside the precinct is not restricted;
- iii. optimising the smokeless capacity of flares so as to minimise the frequency and duration of visible smoke; and
- iv. minimising non-emergency flaring of gas.

21-2 The proponent shall establish and implement an air emissions monitoring programme for the life of any relevant part of the proposal to monitor the emissions listed in 21-1 above and provide the data collected to the DEC at least annually.

21-3 As part of a Works Approval application under Part V of the Act for any LNG plant the proponent responsible for the relevant works shall provide reports to the DEC showing:

- i. specific design features that have been used to minimise and monitor emissions to air, pursuant to condition 21-1;
- ii. how the design features compare with contemporary best practice and lowest emissions for similar operations and proposals internationally and within Australia;
- iii. how National Environment Protection Measure monitoring investigation levels have been used to guide the design and operation of relevant facilities with respect to air quality; and
- iv. a peer reviewed report as required by condition 21-4.

21-4 The proponent shall commission an independent peer reviewer(s), approved by the CEO to undertake the following, in accordance with terms of reference also approved by the CEO:

- i. a review of the reports referred to in conditions 21-3 i and ii;
- ii. provide comment on the basis and validity of the conclusions in the reports; and

- iii. provide comment on the relevance of the described Australian and international contemporary best practice and standards for this Proposal.

21-5 Where practicable, the proponent shall replace plant and equipment with that which meets the contemporary best practice standards at the time of replacement. Replacement equipment shall not result in an increase in emissions or reduction in air quality.

## **22 Greenhouse Gas Emissions**

22-1 The proponent shall report the greenhouse gas emissions from the LNG plant on an annual basis, in a manner prescribed by the CEO.

## **23 Fossil Heritage Management**

23-1 The proponent shall:

- i. ensure no part of the proposal encroaches on the area shown as Area H on Figure 1 and defined by co-ordinates in Schedule 2;
- ii. not cause or allow, directly or indirectly, environmental harm to the fossilised dinosaur footprints in Area H as depicted in Figure 1 and defined by coordinates in Schedule 2; and
- iii. ensure, to the fullest extent practicable, that activities including the installation and operation of any facilities located on land where Broome Sandstone is exposed at the surface on any predicted tide, either naturally or by activities associated with the implementation of the proposal, do not cause environmental harm to fossilised dinosaur footprints, and other fossils associated with them.

23-2 The proponent shall not commence installation of facilities or conduct activities causing ground disturbance on land where Broome Sandstone is exposed at the surface on any predicted tide, either naturally or by activities associated with the implementation of the proposal, prior to conducting a detailed Fossil Heritage Survey of fossilised dinosaur footprints and other fossils associated with them.

23-3 The Fossil Heritage Survey shall be conducted in a manner approved by the CEO in consultation with the native title claimant for the land and the Western Australian Museum and shall be peer reviewed by a suitably qualified independent specialist.

23-4 The proponent shall prepare a Fossil Heritage Management Program that identifies how fossils found during the survey required by condition 23-2 and additional fossils that may be exposed during the implementation of the Proposal will be either avoided, salvaged or adequately recorded, prior to disturbance, in a manner approved by the CEO in consultation with the native title claimant for the area and the Western Australian Museum and a suitably qualified independent specialist.

23-5 The proponent shall implement the Fossil Heritage Management Program required by condition 23-4 in the event that fossils are found.

23-6 The proponent shall put in place a program to ensure that fossil dinosaur tracks outside the Precinct area are protected and preserved to the extent that:

- i. works on the precinct do not create offsite effects that would damage fossil dinosaur tracks; and
- ii. workers and contractors engaged on the proposal are aware of the scientific and cultural significance of fossil dinosaur tracks and do not damage them.

## **24 Decommissioning**

24-1 After the proponent permanently ceases to operate the Proposal for the purposes for which it is implemented, the proponent shall:

- i. remove or, if agreed in writing by the CEO on advice from the appropriate regulatory authority in consultation with relevant stakeholders, retain (that is, leave in-situ) plant and infrastructure;
- ii. rehabilitate the site to a standard suitable for the future land use(s) as agreed pursuant to the consultation referred to in condition 24-1i; and
- iii. investigate soil and groundwater quality and remediate contaminated areas to protect the environment to a standard suitable for future land uses to the satisfaction of CEO on advice from the DoW and DEC.

## **25 Residual Impacts and Risk Management Measures**

25-1 The proponent shall not carry out ground disturbing activities prior to:

- i. submitting a program of Residual Impact and Risk Management Measures to the CEO; and
- ii. receiving written notice from the CEO, having consulted DEC, that the Residual Impact and Risk Management Measures meets the requirements of these conditions.

25-2 The Residual Impact and Risk Management Measures shall be developed consistent with the *WA Government Environmental Offsets Policy 2011* and *EPA Position Statement 9* and *Guidance Statement 19* on environmental offsets, or subsequent versions thereof.

25-3 The Residual Impact and Risk Management Measures shall contain project(s) to mitigate residual impacts of the proposal where each project has the following elements:

- i. an outline that identifies each project(s) relationship to the affected environmental assets and the related residual impacts and risks to those environmental assets from the proposal;

- ii. objectives and targets to be achieved;
- iii. timeframes and responsibilities for implementation;
- iv. funding schedule and financial arrangements;
- v. governance arrangements; and
- vi. monitoring, reporting and evaluation mechanisms.

25-4 The proponent shall implement the Residual Impact and Risk Management Measures which meet the requirements of these conditions.

## **26 Preparation and Review of Plans and Programs**

26-1 If the proponent amends any plan, program, report or strategy required by these conditions, the proponent must implement the amended plan, program, report or strategy from the date of approval of the amendment.

26-2 If any plan, program, report or strategy is required to be approved under these conditions, the proponent may only make a significant amendment to the plan, program, report or strategy if the amendment is also endorsed by the BLNG Precinct Control Group and approved by the CEO. Significant amendments are those amendments which alter the obligations of the proponent, that is, are not minor or administrative.

26-3 The proponent shall prepare all plans for the management of the environment documented in the Strategic Assessment Report Response to Submissions Annexure 4 Tables A4.1 to A4.6 of September 2011.

26-4 The proponent shall consult with relevant stakeholders as appropriate regarding each plan in condition 26-3 and plans and programs required by other conditions in this Statement as agreed by the CEO prior to endorsement of each plan by the CEO and prior to implementation of each plan.

## **27 Staging and Timing for the Submission of Programs**

27-1 Where these conditions require a management, monitoring or compliance reporting program to be submitted prior to a specified activity being undertaken, if that activity is to be undertaken in stages, then the management, monitoring or compliance reporting program may be submitted that relates only to (and prior to) the undertaking of the specified activity relating to that stage. Subsequent programs submitted for the subsequent stages of that activity must update and consolidate the program. This condition does not apply to conditions relating to the submission of state of the environment baseline surveys or disturbance footprint plans.

## **28 Minor or Preliminary Activities**

28-1 Notwithstanding those conditions which constrain the undertaking of a specified activity prior to the proponent submitting a program to the CEO and receiving written notice from the CEO that the program meets the requirements of the condition, the CEO may consent in writing to the proponent undertaking minor and preliminary activity, of the kind specified, provided the proponent demonstrates to the CEO that the minor and preliminary activity will not undermine the purpose of the condition or the objectives of the program referred to in the condition. This condition does not apply to conditions relating to the submission of state of the environment baseline surveys or disturbance footprint plans.

## **29 Public Availability of Data, Plans, Programs and Surveys**

29-1 Subject to condition 29-2, within a reasonable time period approved by the CEO from the date of the section 45A Notice and for the remainder of the life of the proposal the proponent shall make publicly available, in a manner approved by the CEO, all validated environmental data (including sampling design, sampling methodologies, empirical data and derived information products (e.g. maps)) relevant to the assessment of this Proposal and implementation of this Proposal.

29-2 If any of the data referred to in condition 29-1 contains particulars of:

- i. a secret formula or process;
- ii. confidential commercially sensitive information; or
- iii. the location of threatened species or other important environmental assets that may be threatened if their location was published,

the proponent may submit a request for approval from the CEO to not make this data publicly available. In making such a request the proponent shall provide the CEO with an explanation and reasons why that data should not be made publicly available.

29-3 The proponent is to make all plans approved under these conditions, and all Programs and Surveys which meet the requirements of these conditions, available to the public in a manner approved by the CEO.

[Signed 19 November 2012]

**HON BILL MARMION MLA  
MINISTER FOR ENVIRONMENT; WATER**

## Schedule 1

**Table 1: Description of developments/activities of future proposals and their maximum limits/extents**

	Developments/activities/ change in land use	Description of limits/extent
1	Hydrocarbon processing area	<p>Maximum of two heavy industrial areas of up to 500 hectares (ha) each (in total up to 1,000 ha) to be located within Area B identified in Figure 1 – Precinct Layout.</p> <p><u>Permitted Use and Development:</u></p> <ul style="list-style-type: none"> <li>• Facilities for the conversion of natural gas to produce up to 50 Mtpa of LNG (plus associated LPG, condensate, other hydrocarbon products (excluding petrochemicals)), storage and export at variable rates, flare structures, other ancillary facilities and facilities for carbon dioxide export offsite.</li> <li>• Any relevant supporting infrastructure – including wastewater treatment facilities, water supplies, desalination water production facility (if required), electricity generation plants, concrete batching plants, rock screening and crushing facilities, relevant administration buildings and offices, internal access and haul roads.</li> <li>• Clearing of terrestrial native vegetation directly related to permitted uses and developments but not exceeding the areas listed in item 11.</li> </ul>
2	Common user area	<p>Up to 980 ha for the common user area within Area B as identified in Figure 1 – Precinct Layout.</p> <p><u>Permitted Use and Development:</u></p> <ul style="list-style-type: none"> <li>• Lay down areas and internal buffer areas between the industrial facilities.</li> <li>• Administration and plant buildings.</li> <li>• Internal access roads.</li> <li>• Wastewater pipes.</li> <li>• Temporary stockpiles.</li> <li>• Contractor offices.</li> <li>• Concrete batch plant.</li> <li>• Trucking, parking and assembly areas.</li> <li>• Flood management works.</li> <li>• Clearing for bush fire management.</li> <li>• Service utilities.</li> <li>• Clearing of terrestrial native vegetation directly related to permitted uses and developments but not exceeding the areas listed in item 11.</li> </ul>
3	Light industrial area (LIA)	Up to 200 ha within area C as identified in Figure 1 –



		<p>Precinct Layout.</p> <p><u>Permitted Use and Development:</u></p> <ul style="list-style-type: none"> <li>• Developments and uses permitted in light industrial area include all those developments and uses permissible in the Industrial Zone referred to in the Shire of Broome Town Planning Scheme No. 4 (e.g. fuel and transport depot and warehouses), subject to any buffer zone restrictions, as identified in Figure 1 - Precinct Layout.</li> <li>• Clearing of terrestrial native vegetation directly related to permitted uses and developments but not exceeding the areas listed in item 11.</li> </ul>
4	Port Area	<p>Up to 1,100 ha within Area A identified in Figure 1 – Precinct Layout.</p> <p><u>Permitted Use and Development:</u></p> <ul style="list-style-type: none"> <li>• Loading berths and load out infrastructure.</li> <li>• Multi-user shipping channel.</li> <li>• Desalination seawater intake and brine outlet.</li> <li>• Flood management works.</li> <li>• Tug pens.</li> <li>• Support vessel area.</li> <li>• Storage tanks (diesel, LNG, LPG, condensate).</li> <li>• Marine flares.</li> <li>• Pipelines.</li> <li>• Roads.</li> <li>• Lay down areas.</li> <li>• Piled jetties.</li> <li>• Turning basin(s).</li> <li>• Breakwater(s) (as required in final design).</li> <li>• Wastewater disposal pipelines and diffusers.</li> <li>• Capital and maintenance dredging.</li> <li>• Integrated Marine Facilities (IMF), including connecting causeway(s), support vessel harbours, marine support facilities, marine offloading facilities (MOF) and roll-on, roll-off facilities (RORO).</li> <li>• Breakwater(s)/seawall(s) (as required).</li> <li>• Clearing of terrestrial native vegetation directly related to permitted uses and developments but not exceeding the areas listed in item 11.</li> <li>• Total permanent loss of Benthic Primary Producers and Benthic Primary Producer Habitat directly related to permitted uses and developments, but not exceeding the area of loss listed in item 12.</li> </ul>
5	Shipping Channel Area	<p>Shipping channel within Area G (identified in Figure 1 – Precinct Layout) up to 550 m wide and extending from the limit of Port Area A to the limit of State Waters.</p>

		<p><u>Permitted Use and Development:</u></p> <ul style="list-style-type: none"> <li>Multi-user shipping channel.</li> </ul>
6	Pipeline Corridor Areas	<p>Areas E and F identified in Figure 1 – Precinct Layout. Up to 250 ha of terrestrial habitat in aggregate may be utilised for pipelines and their operating/ service corridors.</p> <p><u>Permitted Use and Development:</u></p> <ul style="list-style-type: none"> <li>Construction of up to a maximum of 16 pipelines in total in Areas E and F for natural gas, mono-ethylene glycol, liquids, services and potentially carbon dioxide export.</li> <li>Support facilities.</li> <li>Clearing of terrestrial native vegetation directly related to permitted uses and developments but not exceeding the areas listed in item 11.</li> <li>Total permanent loss of Benthic Primary Producers and Benthic Primary Producer Habitat directly related to permitted uses and developments, but not exceeding the area of loss listed in item 12.</li> </ul>
7	Accommodation Area	<p>Up to 200 ha within Area D identified on Figure 1 – Precinct Layout</p> <p><u>Permitted Use and Development:</u></p> <ul style="list-style-type: none"> <li>Accommodation and associated support facilities.</li> <li>Clearing of terrestrial native vegetation directly related to permitted uses and developments but not exceeding the areas listed in item 11.</li> </ul>
8	Infrastructure and services corridors	<p>Up to a total of 297 ha located within 13 km from the boundary of Area B identified in Figure 1 - Precinct Layout.</p> <p><u>Permitted Use and Development:</u></p> <ul style="list-style-type: none"> <li>Borefield.</li> <li>Electricity transmission services corridors.</li> <li>Pipelines from borefield to Precinct .</li> <li>Borefield access and service roads.</li> <li>Manari Road diversion.</li> <li>Service facilities.</li> <li>Other access and management tracks.</li> <li>Clearing of terrestrial native vegetation directly related to permitted uses and developments but not exceeding the areas listed in item 11.</li> </ul>
9	Industrial land use buffer zone	<p>Area extending 2,000 m from the boundary of Area B identified in Figure 1 - Precinct Layout. The outer boundary of the industrial land use buffer zone is indicated by broken yellow line in Figure 2 - Precinct Layout.</p> <p><u>Permitted Use and Development:</u></p> <ul style="list-style-type: none"> <li>No permanent land uses or activities are permitted save for the infrastructure and service corridor developments and activities (see item 8).</li> </ul>

10	Sensitive land use buffer zone	<p>Area between 2,000 m and 3,000 m from the boundary of Area B identified in Figure 1 - Precinct Layout. The outer boundary of the sensitive land use buffer zone is indicated by broken green line on Figure 1 - Precinct Layout.</p> <p><u>Permitted Use and Development:</u></p> <ul style="list-style-type: none"> <li>• No sensitive land uses are permitted (e.g. accommodation).</li> <li>• Compatible light industry uses and development permissible.</li> </ul>
11	Clearing of terrestrial native vegetation across all Areas shown in Figure 1 - Precinct Layout	<p>Total clearing of terrestrial native vegetation permissible for all future development, activities and changes of land uses is up to a maximum of 3,037 ha in the Areas and amounts as specified below:</p> <ul style="list-style-type: none"> <li>• Area A up to 110 ha,</li> <li>• Area B up to 1,980 ha,</li> <li>• Area C up to 200 ha,</li> <li>• Area D up to 200 ha,</li> <li>• Areas E and F up to 250 ha in aggregate,</li> <li>• Within 13 km of the boundary of Area B an area of up to 297 ha in addition to the limits to clearing provided for in Areas A, B, C, D, E and F identified by co-ordinates in Schedule 1.</li> </ul> <p>Within the total area of permissible clearing no more than a maximum of 83 ha in the implementation foundation proposal or 110 ha in the implementation of any combination of derived proposals of Monsoon Vine Thicket Threatened Ecological Community to be cleared either directly or indirectly (e.g. as a consequence of groundwater drawdown).</p>
12	Permanent loss of Benthic Primary Producers and Benthic Primary Producer Habitat	<p>Permanent loss of Benthic Primary Producers and Benthic Primary Producer Habitat directly related to permitted uses and developments in:</p> <ul style="list-style-type: none"> <li>• Port Area A,</li> <li>• Marine portions of the Pipeline Corridor Areas E and F,</li> <li>• Shipping Channel Area G,</li> </ul> <p>to be confined to the Zone of High Impact.</p>
13	Construction and operation of hydrocarbon processing facilities for converting natural gas to LNG plus associated LPG and condensate (excluding petrochemicals).	<ul style="list-style-type: none"> <li>• Located within Port Area A and/or heavy industrial areas located in Area B.</li> <li>• Up to a maximum combined operating capacity of 50 Mtpa of LNG.</li> <li>• LNG, condensate and LPG storage tanks commensurate with a 50 Mtpa LNG development.</li> <li>• Clearing of terrestrial native vegetation directly related to permitted uses and developments but not exceeding the areas listed in item 11.</li> </ul>
14	Construction and operation of supporting	<ul style="list-style-type: none"> <li>• Located within Port Area A and/or heavy industrial</li> </ul>

	developments and activities.	<p>area in Area B.</p> <ul style="list-style-type: none"> <li>• Discharge from wastewater treatment facilities and wastewater outfalls of up to a total of 30 GL per annum of produced water, condensed water, desalination brine, treated sewage and greywater.</li> <li>• First flush stormwater to be captured and treated and all captured water to be used on site or discharged via marine outfall.</li> <li>• Water supply by groundwater abstraction and/or desalination of up to a combined total of 8 GL per annum.</li> <li>• All supporting infrastructure necessary for LNG production developments/activities contained within Precinct boundaries A to F and the borefield within 13 km of the boundary of Area B, identified in Figure 1 - Precinct Layout.</li> </ul>
15	Construction and operation of a marine and terrestrial port and port infrastructure including.	<p>Up to 1,100 ha within Port Area A (identified in Figure 1 - Precinct Layout) comprising;</p> <ul style="list-style-type: none"> <li>• Up to 6 loading berths.</li> <li>• Up to 3 piled jetties extending up to 3 km west from the current location of the Lowest Astronomical Tide.</li> <li>• One multi-user shipping channel to limit of Area A as identified in Figure 1 – Precinct Layout.</li> <li>• Turning basins.</li> <li>• Breakwaters extending up to 3 km west from the current location of the Lowest Astronomical Tide.</li> <li>• Wastewater pipelines and diffusers with up to 30 GL per annum capacity.</li> <li>• Up to 34 million m3 of capital dredging plus periodic maintenance dredging – (more details see item 19 below).</li> </ul>
16	Construction and operation of the Multi-user Shipping Channel.	<p>Multi-user shipping channel in Area G identified in Figure 1- Precinct Layout.</p> <ul style="list-style-type: none"> <li>• Up to 550 m wide and extending from the western limit of Port Area A to the limit of State Waters.</li> </ul>
17	Construction and operation of the Integrated Marine Facilities (IMF).	<p>Contained within Area A identified in Figure 1 - Precinct Layout.</p> <ul style="list-style-type: none"> <li>• Onshore excavation (if required) shall not extend more than 330 m east from current location of Highest Astronomical Tide.</li> <li>• Clearing of terrestrial native vegetation related to IMF is included in the 110 ha of permissible clearing in Area A at item 11 above.</li> </ul>
18	Construction and use of accommodation village.	<ul style="list-style-type: none"> <li>• Clearing of terrestrial native vegetation directly related to permitted uses and developments but not exceeding the areas listed in item 11.</li> <li>• All access to and from accommodation village to be via Browse LNG Precinct Road (not part of this proposal).</li> </ul>

19	Dredging and spoil disposal activities.	<ul style="list-style-type: none"> <li>• Up to 34 million cubic metres of capital dredge material plus periodic maintenance dredging as required.</li> <li>• No dredge spoil disposal in State Waters.</li> </ul>
20	Infrastructure and Services Corridor development activities.	<ul style="list-style-type: none"> <li>• Groundwater production limited to up to 8 GL per annum.</li> <li>• Clearing up to 297 ha directly related to activities in this item within 13 km of the boundary of Area B indicated in Figure 1 – Precinct Layout.</li> </ul>
21	Pipeline corridors for gas, mono-ethylene glycol, liquids, and potentially carbon dioxide export and communications.	<ul style="list-style-type: none"> <li>• Within Areas E and F identified in Figure 1 – Precinct Layout.</li> <li>• Clearing of terrestrial native vegetation directly related to permitted uses and developments, but not exceeding the areas listed in item 11.</li> </ul>

## Schedule 2

### Co-ordinates of Disturbance Footprint Boundaries

The co-ordinates defining the *Disturbance Footprint Boundaries* dataset are prescribed below, noting that the correct recreation of the boundaries requires the sequential connection of the co-ordinates as per its co-ordinate number.

All co-ordinates are listed in Map Grid of Australia Zone 51 (MGA Zone 50), datum of Geodetic Datum of Australia 1994 (GDA94).

Co-ordinate No.	Easting	Northing	Area
1	409104.17	8065051.08	A
2	409104.23	8065050.67	A
3	409267	8065050	A
4	409323.49	8065050	A
5	409400.8	8065050	A
6	410017	8065050	A
7	410017	8063700	A
8	410017	8063280	A
9	409807.4	8063280	A
10	409267	8063280	A
11	409267	8063057.33	A
12	409267	8062100	A
13	409267	8061350	A
14	405967	8061350	A
15	405967	8062100	A
16	405967	8065200	A
17	405967	8065950	A
18	408444.06	8065950	A
19	408928.32	8065051.94	A
20	409104.17	8065051.08	A
1	414077	8067108	B
2	414077	8061908	B
3	410420	8061908	B
4	410377	8061908	B
5	410377	8061984	B
6	410377	8063280	B
7	410017	8063280	B
8	410017	8063700	B
9	410017	8065200	B
10	410017	8065950	B
11	410377	8065950	B
12	410377	8067108	B
13	414077	8067108	B

Co-ordinate No.	Easting	Northing	Area
1	416077	8066097	C
2	418128	8066097	C
3	418128	8060889	C
4	416993	8060889	C
5	416077	8062378	C
6	416077	8066097	C
1	415477.97	8051593.2	D
2	415414.35	8051853.83	D
3	415140.34	8052236.23	D
4	414866.32	8052618.64	D
5	414592.31	8053001.05	D
6	414318.29	8053383.46	D
7	414044.28	8053765.87	D
8	413770.26	8054148.28	D
9	413496.25	8054530.69	D
10	413414.11	8054645.06	D
11	418202	8057490	D
12	420129	8054357	D
13	415477.97	8051593.2	D
1	412085.9	8061914.55	E
2	412087	8059162	E
3	403716.88	8059162.02	E
4	403734.2	8059247.13	E
5	403778.82	8059433.34	E
6	403829.85	8059617.9	E
7	403827.49	8059820.88	E
8	403832.54	8060023.82	E
9	403841.04	8060161.96	E
10	411087	8060162	E
11	411087.03	8061907.96	E
12	412085.9	8061914.55	E
1	411609.95	8069857.97	F
2	411610	8067108	F

Co-ordinate No.	Easting	Northing	Area
3	410610	8067108	F
4	410610.05	8068857.98	F
5	403389.89	8068857.96	F
6	403389.99	8068858.21	F
7	403422.05	8068958.86	F
8	403486.06	8069138.32	F
9	403556.18	8069315.48	F
10	403632.34	8069490.14	F
11	403714.45	8069662.08	F
12	403802.4	8069831.1	F
13	403816.96	8069857.97	F
14	403816.97	8069857.96	F
15	411609.95	8069857.97	F
1	405967	8063500	G
2	405967	8063355.56	G
3	403540.87	8063347.06	G
4	403520.59	8063500	G
5	403502.17	8063619.13	G
6	403491.36	8063641.38	G
7	403406.48	8063823.55	G
8	403328.26	8064008.67	G
9	403256.77	8064196.5	G
10	403192.12	8064386.8	G
11	403141.14	8064545.39	G

Co-ordinate No.	Easting	Northing	Area
12	403094.92	8064705.43	G
13	403053.52	8064866.79	G
14	403016.97	8065029.32	G
15	402976.23	8065222.89	G
16	402942.4	8065417.78	G
17	402931.12	8065500	G
18	405967	8065500	G
19	405967	8065200	G
20	405967	8063500	G
1	408996	8065950	H
2	409267	8065950	H
3	409274.72	8065950	H
4	410017	8065950	H
5	410017	8065200	H
6	410017	8065050	H
7	409267	8065050	H
8	409104.23	8065050.67	H
9	409104.17	8065051.08	H
10	408928.32	8065051.94	H
11	408444.06	8065950	H
12	408455.91	8065950	H
13	408487.7	8065950	H
14	408958.62	8065950	H
15	408996	8065950	H

END OF CO-ORDINATE LISTING

### Schedule 3

#### Environmental Values and Environmental Quality Objectives for the Marine Waters off James Price Point and including the Port Area.

Environmental Values*	Environmental Quality Objectives
<b>Ecosystem Health</b> <i>(ecological value)</i>	Maintain ecosystem integrity <i>This means maintaining the structure (e.g. the variety and quantity of life forms) and functions (e.g. the food chains and nutrient cycles) of marine ecosystems.</i>
<b>Recreation and Aesthetics</b> <i>(social use value)</i>	Water quality is safe for recreational activities in the water (e.g. swimming). Water quality is safe for recreational activities on the water (e.g. boating). Aesthetic values of the marine environment are protected.
<b>Cultural and Spiritual</b> <i>(social use value)</i>	Cultural and spiritual values of the marine environment are protected.
<b>Fishing and Aquaculture</b> <i>(social use value)</i>	Seafood (caught or grown) is of a quality safe for eating. Water quality is suitable for aquaculture purposes.
<b>Industrial Water Supply</b> <i>(social use value)</i>	Water quality is suitable for industrial supply purposes.

\* Based on the National Water Quality Management Strategy Report 4, *Australian and New Zealand Guidelines for Fresh and Marine Water Quality* (2000).



## Schedule 4

### Levels of Ecological Protection to be achieved in Marine Waters

Area	Narrative Description and Criteria
<b>Low Ecological Protection Area (LEPA)</b>	<p>To allow for large changes in the quality of water, sediment and biota (eg. Large changes in contaminant concentrations causing large changes beyond natural variation in the natural diversity of species and biological communities, rates of ecosystem processes and abundance/biomass of marine life, but which do not result in bioaccumulation/biomagnification in nearby high ecological protection areas).</p> <p>For this protection level only the 80% species protection guideline trigger values* for potentially bio-accumulating toxicants in water apply. There should be no bioaccumulation in adjacent high ecological protection areas.</p>
<b>Moderate Ecological Protection Area (MEPA)</b>	<p>To allow moderate changes in the quality of water, sediment and biota (eg moderate changes in contaminant concentrations that cause small changes, beyond natural variation, in ecosystem processes and abundance/biomass of marine life, but no detectable changes from the natural diversity of species and biological communities).</p> <p>For this protection level the 90% species protection guideline trigger values* for toxicants in water apply and for discharges that contain a mixture of toxicants, the sum of the concentrations of the primary toxicants (up to 5 toxicants) should not exceed the sum of the relevant trigger values. For other physical and chemical parameters the trigger values are based on the 95<sup>th</sup> percentile of natural background measurements. Trigger values should be derived in accordance with the recommended approaches in ANZECC &amp; ARM CANZ (2000). For sediments the ISQG-low* apply.</p> <p>For dissolved oxygen the outfalls should preferably be managed so that they do not cause the median dissolved oxygen concentration in waters ≤0.5 metres from the seafloor, calculated over a period of up to 6 weeks, to fall below 80% saturation at any site, but they should never cause dissolved oxygen concentrations to fall below 60% saturation.</p>
<b>High Ecological Protection Area (HEPA)</b>	<p>To allow small changes in the quality of water, sediment and biota (eg. small changes in contaminant concentrations with no resultant detectable changes beyond natural variation in the diversity of species and biological communities, ecosystem processes and abundance/biomass of marine life).</p> <p>For this protection level the 99% species protection guideline trigger values* for toxicants in water apply (except for cobalt for which the 95% species protection guideline should apply) and for discharges that contain a mixture of toxicants, the sum of the concentrations of the primary toxicants (up to 5 toxicants) should not exceed the sum of the relevant trigger values. For other physical and chemical parameters the trigger values are based on the 80<sup>th</sup> percentile of natural background measurements. Trigger values should be derived in accordance with the recommended approaches in ANZECC &amp; ARM CANZ (2000). For sediments the ISQG-low* apply.</p> <p>For dissolved oxygen the outfalls should preferably be managed so that they do not cause the median dissolved oxygen concentration in waters ≤0.5 metres from the seafloor, calculated over a period of up to 6 weeks, to fall below 90% saturation at any site, but they should never cause dissolved oxygen concentrations to fall below 60% saturation.</p>

\* From National Water Quality Management Strategy Report 4, *Australian and New Zealand Guidelines for Fresh and Marine Water Quality* (2000) or its updates.

## Schedule 5

### Definitions

**Adverse impacts** – means injurious impacts to elements of the environment that render their condition significantly worse than their state as it existed prior to the influence of the adverse impact.

**Best practice** – has the meaning outlined in the Environmental Protection Authority's Guidance 55 *Implementing Best Practice in proposals submitted to the Environmental Impact Assessment process (2003)*.

**BLNG Precinct** – means Browse Liquefied Natural Gas Precinct located at James Price Point as shown and delineated on Figure 1 attached to this Statement.

**Borefield** – means a network of production bore pumps, valves, pipes and associated equipment used to extract and transport groundwater to the BLNG Precinct.

**CEO** – means the chief executive officer of the agency responsible for administering Part IV of the Act.

**Clearing** – without limiting the definition of clearing referred to in the Act, means removal of vegetation or any other activity that causes the death of vegetation, including the drawing down or contamination of groundwater, including causing or allowing salt water intrusion into groundwater on which vegetation depends.

**Coastal Strip** – means land between the level of the highest astronomical tide and the eastern extent of Monsoon Vine Thicket vegetation.

**Commissioning** – means the period following construction but prior to the commencement of steady state operations.

**Conservation significant marine fauna** – includes marine mammals, marine turtles, whale sharks and sawfish.

**Construction** – means construction of a facility and includes any excavation and/or dredging but excludes temporary, minor, preliminary and investigatory works, geotechnical, geophysical, biological and cultural heritage surveys, staging works, baseline surveys, monitoring, technology trials, and works consented to by Office of the EPA.

**Contamination** – means the definition provided in the *Contaminated Sites Act 2003*.

**Contemporary best practice** – means the best practice existing at the time a derived proposal is referred, change to a proposal is authorised or change to implementation conditions is agreed or decided.

**DEC** – means the Department of Environment and Conservation or the agency from time to time responsible for administering the *Wildlife Conservation Act 1950* and the *Conservation and Land Management Act 1984* and relevant parts of the Act.

**Demobilising** – means a voyage or other movement of a vessel following completion of proposal related activities. Note: that if a demobilised vessel or immersible equipment is subsequently required to undertake proposal related activities, that vessel will be deemed to be “mobilising” and will be required to meet the relevant mobilisation requirements.

**DoF** – means the Department of Fisheries or the agency from time to time responsible for administering the *Fish Resources Management Act 1994*.

**DoT (Maritime Planning Section)** – means the Department of Transport or the agency from time to time responsible for administering the *Marine and Harbours Act 1981*.

**DoW** – means the Department of Water or the agency from time to time responsible for administering the *Rights in Water and Irrigation Act 1914*.

**DMP** – means the Department of Mines and Petroleum or the agency from time to time responsible for administering the *Dangerous Goods Safety Act 2004* or the *Petroleum Pipelines Act 1969*.

**Drainage basin vegetation community** – means the vegetation mapped and labelled as such on Map 3 in Appendix 3 of Appendix C-18 of the proponent's Strategic Assessment Report.

**Foundation proposal** – means the first derived proposal involving construction of a liquefied natural gas plant bought forward under this strategic proposal.

**Immersible equipment** – means any equipment that is owned by the proponent or is contracted for the construction, maintenance, operation or decommissioning of this Proposal, and that is put into the water but which can be readily removed and transported which would not be considered as a component of the non-trading vessel from which it is deployed. Includes but is not limited to anchors, seismic spreads, well heads, acoustic seabed receivers, cutter suction heads and environmental monitoring equipment.

**Independent Specialist** – means an expert or person independent of the proponent with particular recognised expertise in a subject area commissioned by the proponent and approved by the CEO.

**Inner Port Infrastructure** – means that port infrastructure which lies within and including the outer breakwaters.

**Installation** – means placing facilities within the precinct for use; includes on-site construction within the precinct, but does not include off-site fabrication or construction.

**Intertidal Zone** – means the area bounded by the level of the highest astronomical tide and the level of the lowest astronomical tide.

**Introduced Marine Pests** – means any marine species that poses a threat to the Western Australian environment or industry, if introduced, established or translocated. The marine species that are considered to pose a threat as outlined above include those detailed in the *Western Australian Prevention List for Introduced Marine Pests*, Department of Fisheries (2012), as amended from time to time, and other species that appear to have clear impacts or invasive characteristics.

**LNG** – means liquefied natural gas.

**Management actions** – means management activities, measures, actions, strategies, undertakings or directives which may, depending on the context in which the term is used in Statement:

1. correct or improve upon management actions which have been ineffective;
2. attenuate, minimise or mitigate impacts the Proposal would otherwise have on the environment if the action were not taken; or
3. ensure compliance with conditions, or any monitoring or management triggers established by those conditions.

**Marine facilities** – means any facilities forming part of the proposal that are located in contact with the sea at any time.

**Marine Project Area** (for the purposes of managing Introduced Marine Species) – means the area bounded by a line extending from the coast at a point two kilometres south of Cape Boileau, then west to the State Waters boundary, and a line west from a point on the coast 3 kilometres south of Coulomb Point to the boundary of State Waters.

**Monsoon Vine Thicket** – means the vegetation mapped and labelled as such on Maps 2, 3 and 4 in Appendix 3 of Appendix C-18 of the SAR. In the context of this Statement the allowable loss of Monsoon Vine Thicket vegetation means that portion of this vegetation community that is co-incident with the outline of the BLNG Precinct as delineated by green hatching in Figure 2 attached to this Statement.

**Near-shore** – means situated at sea in proximity to the shore, in this case within the 3 nautical mile limit of State Waters

**Non-trading vessel** – means a vessel either owned by the proponent, or contracted for construction, maintenance, operation or decommissioning of the proposal, that meet the definition of non-trading vessels as appears in the *National Biofouling Management Guidance for Non-Trading Vessels* (Department of Agriculture, Fisheries and Forestry, May 2009).

**Offshore** – means situated at sea some distance from the shore, in this case outside State Waters.

**Onshore facilities** – means any facilities forming part of the proposal located on shore.

**Peer review** – means a documented, critical review performed by peers (where “peer” is defined as a person having technical expertise in the subject matter being reviewed which is at least equivalent to that needed for the original work) who are independent of the work being reviewed. The peer review should determine whether the material being reviewed is of reasonable quality and whether any conclusions or findings are supported by the evidence.

**Pipeline Corridor Areas** – means Areas E and F identified in Figure 1 – Precinct Layout. Up to 250ha in aggregate may be utilised on land for pipelines and their operating/ service corridors.

**Plan** – means a drawing or diagram depicting the layout, dimensions, and any other details relevant to the spatial layout of features of the proposal or condition referred to and the geographic data that defines that layout.

**Port Area** – means an area of up to 1,100 ha within Area A identified in Figure 1 – BLNG Precinct Layout.

**Port facilities** – means any infrastructure that is within the area that is or will come under the jurisdiction of the relevant Port Authority.

**Program** – means a description of a series of events or actions designed to achieve an intended outcome. A program may include one or more plans that show the layout of facilities referred to in that program.

**Relevant stakeholders** – means, among other things, representative local community groups that have a demonstrated interest in the implementation of the proposal, including Traditional Owners and native title claimants, to be determined in consultation with the Office of the EPA at the time.

**Section 45A Notice** – means the notice issued by the Minister under section 45A of the Act.

**SEWPaC** – means the Australian Government Department of Sustainability, Environment, Water, Population and Communities or the Australian Government or the agency from time to time responsible for administering the *Environment Protection and Biodiversity Conservation Act 1999*.

**Shipping Channel Area** means the shipping channel within Area G (identified in Figure 1 – Precinct Layout) up to approximately 550 m wide and extending from the limit of Port Area A to the limit of State Waters.

**Suitably qualified independent specialist** – means an external expert commissioned by the proponent and approved by the CEO.

**Temporary** – as applied to the placement of dredge spoil in State waters, temporary placement is intended to mean for a matter of weeks, not months, and as approved by the CEO in the context of an approved management program.

**Terrestrial facilities** – means any facilities forming part of the Proposal that are located landward from the line of the Highest Astronomical Tide.

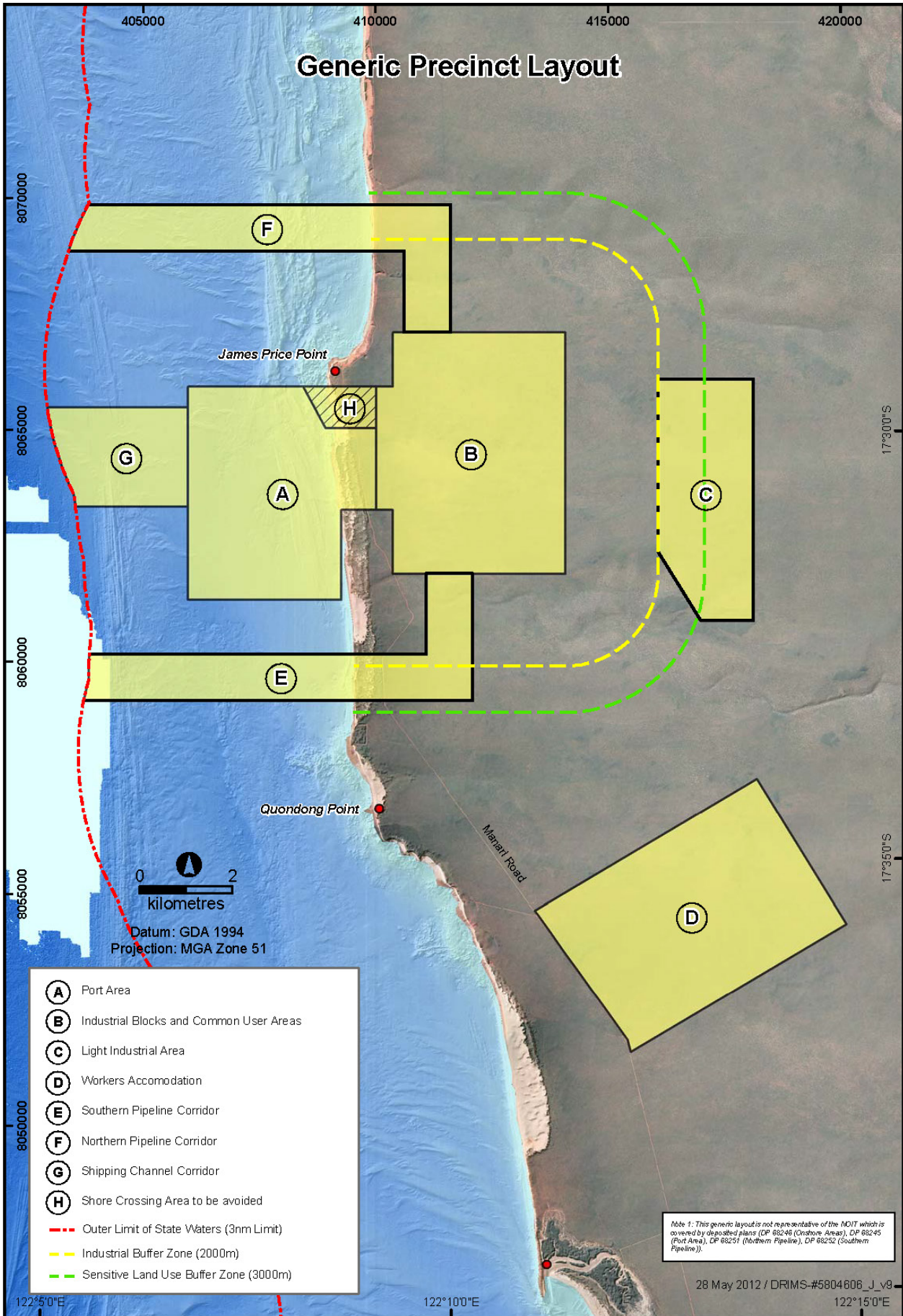
**Terrestrial facilities and disturbance footprint** – means the footprint identified in the Terrestrial Facilities and Disturbance Footprint Plan approved pursuant to condition 5-1 of this Statement.

**Wastewater treatment and wastewater discharge infrastructure** – means pipes, diffusers and any other equipment located in the marine environment that is associated with the discharge of wastewater.

**Weed** – means any plant that is not indigenous to the Dampier Peninsula region.

**Zone(s) of High Impact, Zone(s) of Moderate Impact and Zone(s) of Influence** – means those zones as identified and defined in the Marine Facilities and Impact Zones Plan prepared in accordance with condition 9 of this Statement.

Figure 1: BLNG Precinct Layout





**Figure 2: Area delineated by green hatching within which 83 hectares in the implementation foundation proposal or 110 hectares in the implementation of any combination of derived proposals of Monsoon Vine Thicket may be cleared**

