

Appendix B

Environmental Impact Statement Guidelines for Snake Bay Proposed Aquaculture Farm



Northern Territory Government

Office of Environment and Heritage

PART A

INFORMATION FOR THE PUBLIC

**Guidelines for the preparation of a
Draft Environmental Impact Statement**

**Marine Harvest
Barramundi Fish Farm
Snake Bay, Melville Island NT**

August 2005

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1. INTRODUCTION

These Guidelines have been developed to assist Marine Harvest in preparing a Draft Environmental Impact Statement (DEIS) for the Barramundi Fish Farm Proposal at Snake Bay (Melville Island) NT in accordance with Clause 8 of the Environmental Assessment Administrative Procedures of the *Environmental Assessment Act (1982)* of the Northern Territory.

These (draft) Guidelines consist of two sections:

- Part A (this section) is the introduction and description of the project and the EIS process; and
- Part B (attached) details the type and extent of information to be included in the DEIS. The list includes issues and concerns that were identified before the public and Government review period (for the Draft Guidelines).

2. PROPOSAL

The proponent is Marine Harvest (Gibsons Ltd, trading as Marine Harvest).

The site proposed is at Snake Bay, Melville Island NT.

This is the third of Marine Harvest's three proposed barramundi fish farms in the Northern Territory. The first farm was established at Port Hurd (Bathurst Island) in 2000 as a pilot project. The second proposal is for a development at Port Patterson (Bynoe Harbour) and is subject to a separate environmental assessment.

The proposed farms will each have the capacity to produce 3500 tonnes of fish per year. The site will be stocked with juvenile barramundi supplied by the Darwin Aquaculture Centre (Channel Island) from local wild caught broodstock. The juvenile barramundi will be transferred to the proposed farms when they are approximately 100 mm long, and take 18 months to reach harvest size of approximately 3 kg.

The stock will be fed a pelletised food from automatic feeding stations. Feeding will be monitored to ensure as little wastage as possible in the form of uneaten pellets, to reduce contamination of the seabed and water under and adjacent to the site.

The stocking density of the proposed farms has an upper limit of 45 kg of fish per cubic metre. This is based on a fully stocked cage of 3 kg fish. However the fixed net dimensions and harvesting programs are likely to keep the stocking density below that level.

The proposed farm will be based on plastic circles of 86 metre circumference from which, steel net mesh will be suspended to house the fish. These steel nets have proven to be able to exclude crocodiles and sharks and not entrap any predators. The holding nets will be 8 m deep with a side wall of 4.5 metres. All nets will have a minimum seabed clearance of 2 m. Anchors for the mooring system will be steel anchors. At one end of the unit is a work platform for use by field staff and to hold the automatic feeding system.

Where

The proponent intends to develop one site in Snake Bay, (Melville Island).

Coordinates as below:

Snake Bay -

A	11° 26.00' S	130° 42.10' E
B	11° 26.18' S	130° 41.98' E
C	11° 26.79' S	130° 42.82' E
D	11° 26.51' S	130° 43.15' E

When

Development of this project will commence on completion of the approval process.

Project Details

The Process

Juvenile fish from endemic brood stock will be reared under the auspices of the Darwin Aquaculture Centre to 100mm in length. Each cohort will be transported for on-growing into the sea pens at Port Patterson. Support services for the production unit will be accommodated on a work platform secured to the unit. Feeding will be effected automatically from the platform. Operational staff will monitor food conversion, growth rate, net integrity and cleanliness and other environmental indicators. Monitoring will include visual observations by divers. Regular cleaning as required will control fouling of the nets. Harvested fish will be transported to Darwin live, by well boat, or killed and chilled prior to transportation. At the depot in Darwin, fish will be graded and packed whole, on ice, or further processed for distribution to the markets.

The following waste products will be produced by the proposal:

Wastes to Water

Wastes to water are expected from

- artificial feed that is not consumed by stock;
- fish faeces;
- parasite control treatment; and
- waste water from the occupation of the site by staff.

Solid Wastes:

Solid wastes are expected from:

- Feed bags;
- Dead stock (morts); and
- Waste associated with the occupation of the site by staff.

Noise, Light, Air

Expected noise sources are:

- Outboard motors;
- Feeding equipment; and

- Harvesting operations.

Emissions to air may include fumes, hydrocarbons, solvents, greenhouse gases and noxious smells from dead stock.

The development will involve provision of lighting for operations, including habitation of the site by staff.

3. PURPOSE OF THE DRAFT EIS

The DEIS aims to provide:

- a source of information from which individuals and groups may gain an understanding of the proposal, the need for the proposal, the economic and other benefits that might arise from the proposal, the alternatives, the environment that it would affect, the impacts that may occur and the measures taken to minimise those impacts;
- a basis for public consultation and informed comment on the proposal; and
- a framework against which decision-makers in conjunction with traditional landowners can consider the environmental aspects of the proposal, set conditions for approval to ensure environmentally sound development and recommend an environmental management and monitoring program.

The object of these Guidelines is to identify those matters that should be addressed in the DEIS. The Guidelines are based on the initial outline of the proposal in the Notice of Intent. Not all matters indicated in the Guidelines may be relevant to all aspects of the proposal. Only those matters that are relevant to the proposal should be addressed. The Guidelines, however, are not necessarily exhaustive. They should not be interpreted as excluding from consideration any matters which are currently unforeseen that emerge as important or significant from scientific studies or otherwise during the preparation of the DEIS, the public consultation process and the preparation of the Supplement to the DEIS (response to submissions).

The proposal has been declared a controlled action under the Commonwealth *EPBC Act* because of the potential for significant impacts on listed threatened species and communities, and listed migratory species. The proposal will be assessed in accordance with Schedule 1 to the "Agreement between the Commonwealth of Australia and the Northern Territory under s.45 of the *EPBC Act* relating to Environmental Impact Assessment" (the Bilateral Agreement). The impacts on the controlling actions should be focused on in the EIS to provide adequate information for the Commonwealth Minister to make a decision on approval of the action.

The DEIS should be a self-contained and comprehensive document written in a clear, concise style that is easily understood by the general reader. Being mindful that the major stakeholders in the DEIS process will be Aboriginal communities, the DEIS should be able to be presented in such a way as to enable the Aboriginal community to properly understand the nature of the proposal and provide informed comment.

Cross-referencing should be used to avoid unnecessary duplication of text. Text should be supported where appropriate by easily interpretable maps, plans, diagrams or other descriptive material. Detailed technical information and baseline surveys should be included as appendices.

Content in the DEIS should include both quantitative and qualitative analysis as appropriate. Impacts should not just be treated as adverse; beneficial effects should also be identified.

The justification of the project in the manner proposed should be consistent with the principles of ecologically sustainable development. Assessment of the environmental impacts of the proposal and alternatives should be comprehensive. For the purpose of these Guidelines, the "principles of ecologically sustainable development" are as follows:

- the precautionary principle - namely, that if there are threats of serious or irreversible environmental damage, lack of full scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation;
- inter- and intra-generational equity - namely, that the present generation should ensure that the health, diversity and productivity of the environment are maintained or enhanced for the benefit of future generations;
- conservation of biological diversity and ecological integrity; and
- improved valuation and pricing of environmental resources.

4. EIS PROCESS

The EIS process, as described by the Administrative Procedures of the *Environmental Assessment Act 1982 (EA Act)* of the Northern Territory, is displayed in Figure 2.

Overview of the Process

Once the Minister has determined that an EIS is required, the Office of Environment and heritage (OEH) prepares Draft Guidelines for Preparation of an EIS, after consulting with relevant advisory bodies.

These draft Guidelines are then subject to public review for a 14-day period. At the end of this period, OEH will finalise the draft Guidelines within 14 days for Ministerial approval. When approved, final Guidelines are forwarded to the proponent.

When the proponent has prepared a DEIS to a publishable standard, this document is exhibited for public review and comment for a minimum of 28 days, during which time advisory bodies also comment on the document.

Issues raised in the public comment period are addressed by the proponent in a Supplement to the DEIS. The Commonwealth process requires that the Final EIS be of an adequate standard before publishing to ensure that each matter protected by controlling actions has sufficient information for the Minister/delegate to make a decision. NT advisory bodies review the Supplement.

The NT OEH then has 35 days to prepare an Environmental Assessment Report and Recommendations based on the DEIS and Supplement. If the Minister approves the Report and Recommendations, these are forwarded to the responsible (consent) Minister(s) for inclusion in permit, lease or license conditions and in relevant management procedures (eg. Environmental Management Plans) and the Australian Government Department of the Environment and Heritage for approval under the *EPBC Act*.

The Assessment Report and Recommendations are included on the OEH website and hard copies are provided to respondents and selected public libraries and viewing sites.

5. ADMINISTRATION

The Project Officer for the environmental impact assessment is Mr Roderick Johnson from the Office of Environment and Heritage, Department of Natural Resources, Environment and the Arts (DNRETA). The contact telephone number is (08) 8924 4002 and facsimile number (08) 89244 4053, e-mail: roderick.johnson@nt.gov.au.

Copies of the Final Guidelines will be posted on the DNRETA website www.ipe.nt.gov.au/enviro.

The EIS will be advertised for public comment in *The Northern Territory News* and *The Australian* newspapers. Copies of the EIS will be available to the public at public exhibition sites around Darwin and outer centres, or for purchase from the proponent or download from the DNRETA website. **Comments on the EIS should be forwarded to the nominated Project Officer.**