Report and recommendations of the Environmental Protection Authority

Commercial Scale Algae Farm and Processing Facilities, Karratha

Aurora Algae Pty Ltd

Report 1475

May 2013

Assessment on Proponent Information
Environmental Impact Assessment Process Timelines

Date	Progress stages	Time (weeks)
21/12/2010	Level of assessment set	
9/4/2013	Proponent's Final API document received by EPA	120
20/5/2013	Publication of EPA report (3 days after report to Minister)	6
4/6/2013	Close of appeals period	2

Timelines for an assessment may vary according to the complexity of the project and are usually agreed with the proponent soon after the level of assessment is determined.

In this case, the Environmental Protection Authority met its timeline objective in the completion of the assessment and provision of a report to the Minister.

Dr Paul Vogel

Chairman

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Contents

1. Introduction and background

This report provides the Environmental Protection Authority's (EPA's) advice and recommendations to the Minister for Environment on the proposal to develop a commercial-scale algae farm and processing facilities by Aurora Algae Pty Ltd (Aurora).

Section 44 of the *Environmental Protection Act 1986* (EP Act) requires the EPA to report to the Minister for Environment on the outcome of its assessment of a proposal. The report must set out:

- the key environmental factors identified in the course of the assessment; and
- the EPA's recommendations as to whether or not the proposal may be implemented, and, if the EPA recommends that implementation be allowed, the conditions and procedures to which implementation should be subject.

The EPA may include in the report any other advice and recommendations as it sees fit.

The proponent has submitted an Assessment on Proponent Information (API) document setting out the details of the proposal, potential environmental impacts and proposed commitments to manage those impacts.

The EPA considers that the proposal, as described, can be managed to meet the EPA's environmental objectives, subject to the EPA's recommended conditions being made legally binding.

This report provides the EPA advice and recommendations in accordance with Section 44 of the EP Act.

2. The proposal

Aurora Algae Pty Ltd (Aurora) is proposing to develop a commercial-scale algae farm and processing facilities located near Karratha in the Shire of Roebourne (Figure 1).

The project would involve cultivation, harvesting, separation and processing of algae. Cultivation would occur in shallow open ponds in the presence of sunlight, seawater and carbon dioxide plus some nutrients and trace elements to promote algal growth. The end products from processing would be:

- biodiesel for use as fuel;
- protein-rich biomass for farmed fish and animal feed; and
- omega 3 oils suitable for human consumption.

Key elements of the project (as shown in Figure 2) would include the following:

- fixed or floating seawater intake point located within a tidal creek;
- seawater intake pipeline from the intake point to the project area;
- open algae ponds;
- evaporation ponds; and
- processing facilities and other infrastructure including a desalination plant.

The main characteristics of the proposal are summarised in the table below.

Table 1: Summary of key proposal characteristics

Column 1	Column 2	Column 3
Element	**Location**	**Authorised Extent**
Algae farm	Figure 2	Clearing no more than 470 hectares (ha) within the 610 ha Algae farm development envelope
Seawater pipeline and associated infrastructure	Figure 2	Clearing no more than 35 ha within the pipeline development envelope
	Figure 2 (Intake Point)	Excavation as required to maintain a deepened area of no more than two metres (m) below the natural bed of the creek over an area of no more than 400 square metres. Excavated material to be removed off site.
Seawater intake velocity		No more than 0.15 m per second

The potential impacts of the proposal are discussed by the proponent in the referral document (Aurora 2013).

Figure 1. Regional location

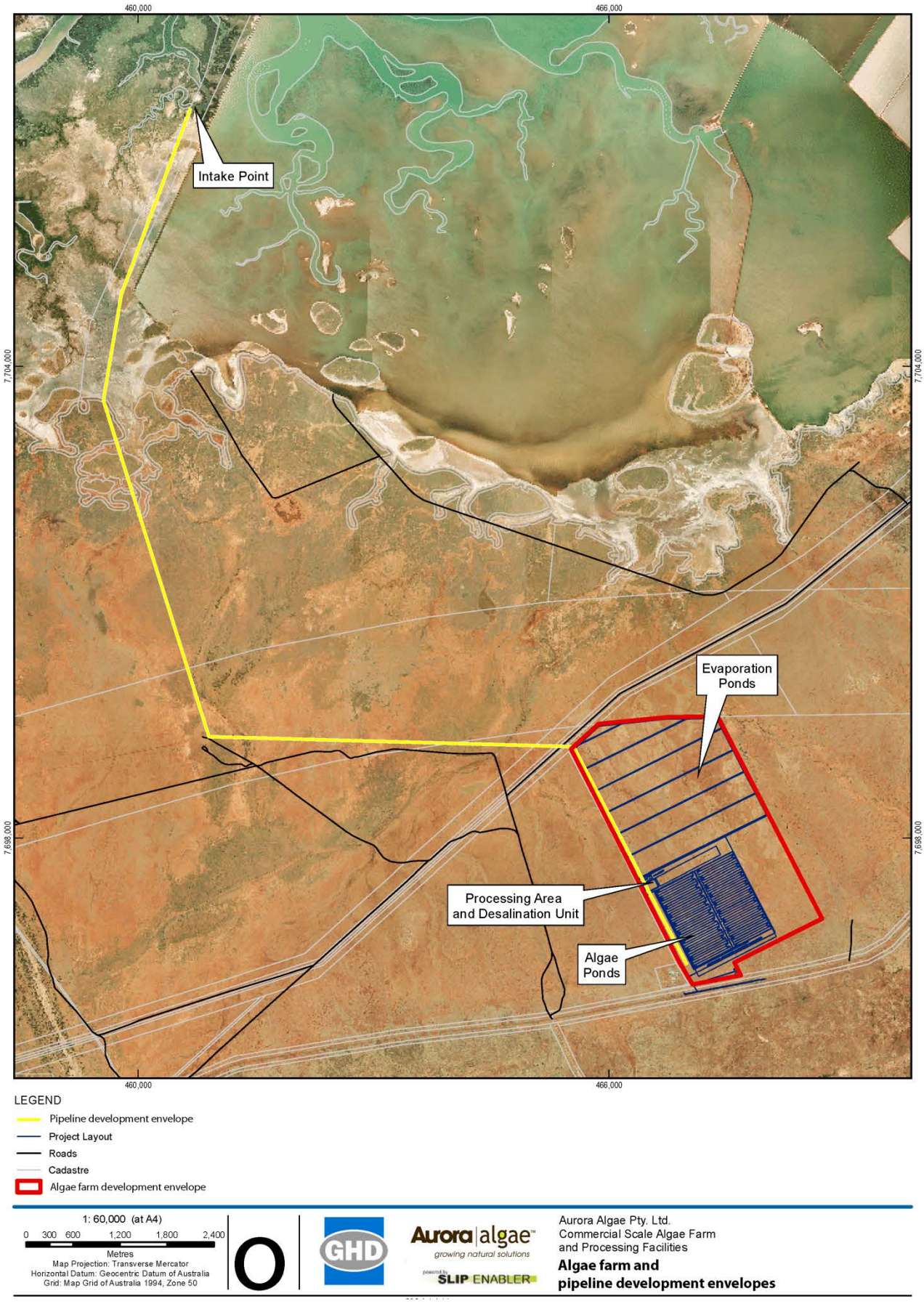

Figure 2. Project layout

3. Consultation

During the preparation of the API, the proponent has undertaken consultation with government agencies and key stakeholders. The agencies, groups and organisations consulted, the comments received and the proponent's response are detailed in the proponent's referral document (Aurora 2013).

The EPA considers that the consultation process has been appropriate and that reasonable steps have been taken to inform the community and stakeholders on the proposed development.

4. Key environmental factors

It is the EPA's opinion that the following key environmental factors relevant to the proposal require evaluation in this report:

(a) Marine Environment: Benthic Communities and Habitat, Coastal Processes, Marine Environmental Quality and Marine Fauna;

(b) Inland Waters Environmental Quality (Groundwater); and

(c) Rehabilitation and closure.

The key environmental factors are discussed in Sections 4.1 – 4.3. The description of each factor shows why it is relevant to the proposal and how it will be affected by the proposal. The assessment of each factor is where the EPA decides whether or not a proposal meets the environmental objective set for that factor.

4.1 Marine environment

Description

The proponent proposes to construct a seawater intake in a tidal creek (Figure 2). The proponent's preferred option would be a floating platform, however a fixed jetty pump station has not been ruled out (MWH 2012).

Construction of a fixed intake would require an area of the tidal creek to be deepened in order to prevent sediment entering the intake. This area is likely to be approximately 20 m by 20 m, and to be deepened by up to 2 m. This would require the removal of up to 800 cubic metres (m^3) of material, which would be removed from site by truck, tested for acid sulfate soil potential and disposed of appropriately. (Aurora 2013).

The tidal creek in which the intake is located is in a low density mangrove area. It has a silty bottom and experiences a tidal range from 1 m to 4 m twice a day. The proponent has estimated that tidal velocities in the area of the intake are likely to be up to 0.23 metres per second (m/s). The intake would draw up to 60 million litres per day (ML/day), with the intake velocity maintained at less than 0.15 m/s (Aurora 2013).

There is the potential for impacts to the marine environment associated with the construction and operation of the intake, including the following:

- *removal of benthic habitat and mangroves associated with the construction of the intake and pipeline channel* - the proposal would result in disturbance of

benthic habitat of approximately 0.04 ha within an assessment area of 56.3 ha which represents 0.07% of the tidal creek habitat. The proponent estimates that approximately 30 mangrove trees would be removed during construction of the intake pipeline.

- *creation of an anoxic area affecting water quality through deepening of the intake channel* - deepening of the tidal creek may result in stratification in the lower part of the tidal creek, leading to development of an anoxic area. This could result in changes to the water quality of the creek, leading to impacts including fish deaths and algal blooms.
- *loss of mangroves through erosion as a result of changes to coastal processes* - deepening of the intake area could impact coastal processes in the area, resulting in erosion and loss of mangroves.
- *impacts to mobile marine species as a result of entrapment in the seawater intake structure* – there is potential for juvenile and smaller fish species to become entrained in the intake structure resulting in impacts to local fish populations.

Assessment

The EPA's objectives for the marine environment factors of Benthic Communities and Habitat, Coastal Processes, Marine Environmental Quality and Marine Fauna are:

- to maintain the structure, function, diversity, distribution and viability of benthic habitats at a local and regional scale;
- to maintain the morphology of the subtidal, intertidal and supratidal zones and the local geophysical processes that shape them;
- to maintain the quality of water, sediment and biota so that the environmental values, both ecological and social, are protected; and
- to maintain the diversity, geographic distribution and viability of fauna at the species and population level.

The proponent has committed to a number of management actions in the API document to ensure that impacts associated with the construction and operation of the intake structure are minimised as far as practicable. These include:

- design and construction of the deepened area of the tidal creek in such a way as to minimise the risk of anoxic areas developing, including consideration of the length and slope of the deepened area to maximise flushing where practicable;
- periodic monitoring of water quality in the intake area, including testing of dissolved oxygen;
- regular visual monitoring of mangrove health and distribution in the intake area to determine any changes that may be attributed to deepening of the intake location, and development and implementation of contingency measures as required;
- intake velocity to be maintained at less than 0.15 m/s, which is less than estimated tidal velocities in the creek (0.23 m/s);

- intake to initially be covered with a primary mesh screen with 19 millimetre (mm) by 19 mm sized holes;
- smaller screens to be fitted or the intake velocity lowered in the event that a large number of fish or other marine species are found to be entrapped in the intake;
- adaptive management strategy including completion of a study to establish whether marine organisms are being trapped against primary screens or drawn into the intake soon after the project is commissioned, and implementation of mitigation measures to reduce this if required; and
- regular monitoring of intake water to determine the amount and types of marine species being drawn into the intake, and regular monitoring of the extent and type of bio fouling occurring on intake screens.

Disturbance of benthic habitat associated with construction of the intake would represent a loss of approximately 0.04 ha of the tidal creek habitat within an assessment area of 53.6 ha, representing 0.07% loss of available benthic habitat. This is consistent with EPA Guidelines for the assessment of benthic habitat (EPA 2009). The EPA therefore considers that impacts to benthic habitat associated with this proposal are unlikely to be locally or regionally significant.

The seawater intake would remove up to 60 ML (60,000 m^3) of water each day from a deepened area of around 800 m^3. Natural tidal flows in the area are likely to flush the deepened area twice daily. Given the high rate of water movement through the excavated area the EPA considers that it is unlikely that stratification and anoxic conditions would develop within the deepened area of the tidal creek.

The EPA notes that the proponent has committed to monitoring water quality, including dissolved oxygen levels in the intake area, and to implementing contingency actions in the event that impacts are detected. The EPA considers that this would mitigate any residual risk to water quality associated with the proposal.

Given that the area to be deepened is less than the width of the tidal creek, the EPA considers that it is unlikely that local impacts to water movements would be sufficient to cause changes to the shoreline. The EPA also notes that the current intake location was selected due to the low density of mangroves in the area; therefore it is unlikely that any loss of mangroves associated with the proposal would be significant.

The EPA notes that the proponent has proposed management actions to prevent entrapment of marine species in the intake pipeline, including limiting the intake velocity to 0.15 m/s, use of mesh screens, and monitoring and adaptive management of entrapment. The EPA considers that impacts to marine species associated with this proposal can be managed to meet the EPA's objective for this factor.

The EPA notes that the proponent significantly amended the proposal during the environmental impact assessment process, to reduce potential marine environmental impacts.

The EPA also notes advice provided by the Department of Fisheries (DoF) that the proposal would be subject to an aquaculture licence, which would require the proponent to prepare and implement a Marine Environmental Management Plan (MEMP), and that the MEMP would include monitoring relating to the above factors as described within the API document.

Summary

Having particular regard to:

- the location of the intake in an area of low mangrove density;
- the maximum intake velocity limited to 0.15 m/s in Table 2 of the recommended conditions (Appendix 2); and
- the Department of Fisheries' ability to regulate aspects of the proposal through the aquaculture licence and associated management plan;

it is the EPA's opinion that the proposal can be managed to meet the EPA's environmental objective for this factor provided that:

- aspects of the proposal associated with the construction and operation of the seawater intake are limited to the authorised extent defined in Appendix 2, Table 2; and
- the proponent undertakes the monitoring (and mitigation measures if required) that they have committed to in their API documentation and includes the results of this monitoring in the Marine Environmental Management Plan required by the Department of Fisheries.

4.2 Inland Waters Environmental Quality (Groundwater)

Description

The proponent intends to construct approximately 450 ha of algae ponds and evaporation ponds. An average of 16 ML per day of saline water would be pumped to the algae ponds from the seawater intake.

The proposal could impact groundwater quality if significant leaks occur from the ponds to the surrounding groundwater.

Groundwater below and near the project area is brackish, and is currently used only for pastoral purposes. No groundwater users or groundwater dependant ecosystems have been identified downstream of the project area. Groundwater flows below the project area in a northerly direction toward the Dampier salt ponds and then discharges to the ocean (GHD 2010).

The open algae ponds would have a plastic liner and leakage to the ground would only be expected if the liner was damaged. The water levels in the ponds would be monitored and any unusual losses would be detected and repairs undertaken. (Aurora 2013)

The evaporation ponds would receive up to 8.49 gigalitres (GL) per year of waste water from the algae ponds and reverse osmosis desalination plant. Waste water would contain high levels of salt and some nutrients.

The evaporation ponds would be sealed using clay material with a minimum permeability of 10^{-7} m/s from within the project area. This seal could potentially allow leakage of saline water from the evaporation ponds into the underlying, from where it would gradually move downwards until it reaches the rock layer known to be 1-2 m

below ground level. From there it would move across the rock surface and discharge north-east towards the Dampier salt ponds. (Aurora 2013).

Salt accumulated in the evaporation ponds would be disposed of to landfill in accordance with the Environmental Protection (Controlled Waste) Regulations 2004.

Assessment

The EPA's objective for this factor is to maintain the quality of groundwater and surface water, sediment and biota so that the environmental values, both ecological and social, are protected.

The proponent has committed to a groundwater monitoring regime in the API document, including installation of six to ten groundwater monitoring bores along expected migration routes for leakage from the evaporation ponds or algae ponds. Water levels in the ponds would also be monitored and any unexpected losses would be investigated.

The proponent has proposed remedial actions which could be taken in the event the monitoring regime described above detects that changes to groundwater levels or quality which are attributable the project have occurred. Remedial actions could include repair of the clay or plastic pond liners and installation of bores to recover affected groundwater.

The EPA notes that the proponent expects that there would be some changes to groundwater quality and quantity beneath and in the near vicinity of the project as a result of leakage from the clay liner of the evaporation ponds. The EPA also notes that these changes are likely to be small given the low level of leakage expected from the clay liners and the rate of evaporation expected within the ponds.

Given that the groundwater in the area is saline, and that there are currently no known users or groundwater dependant ecosystems downstream of the project area, the EPA considers it is unlikely that any impacts to groundwater associated with the proposal would be significant.

The EPA notes that the proponent has committed to quarterly monitoring of groundwater levels and groundwater quality to detect any changes that could be attributed to leakage from the evaporation and algae ponds. The proponent has also committed to contingency actions in the event that significant impacts are detected.

However, the EPA has recommended Condition 6 to ensure that impacts to groundwater values are monitored and appropriate mitigation measure applied if required.

Summary

The EPA considers the issue of inland water quality (groundwater) has been adequately addressed and the proposal can meet the EPA's objectives for this factor provided that:

- the proponent undertakes the monitoring (and mitigation measures if required) that they have committed to in their API documentation as required by recommended ministerial Condition 6.

4.3 Rehabilitation and closure – integrating factor

Description

The proposal has an estimated life of over 20 years and the proponent anticipates that, if successful, the project could continue for a longer period. However, in the event that the project is decommissioned for any reason, it is important that the infrastructure including pipelines, desalination plants and other equipment be removed and other infrastructure such as evaporation ponds and algae ponds be decommissioned in such a way that it is left in a safe and stable manner in accordance with current best practice and in consultation with any relevant stakeholders.

Assessment

The EPA's objective for this factor is to ensure that premises are closed, decommissioned and rehabilitated in an ecologically sustainable manner, consistent with agreed outcomes and land uses, and without any unacceptable liability to the State.

The EPA considers that it is particularly important that any salt be removed from the evaporation ponds and the area be appropriately rehabilitated to prevent future impacts to the surrounding environment.

The EPA therefore recommends a condition requiring the proponent to prepare a decommissioning plan one year prior to closure of the algae farm and processing facilities.

Summary

Having particular regard to the small scale of the proposal, it is the EPA's opinion that the proposal can be managed to meet the EPA's environmental objective for this factor provided that:

- the proponent plans and carries out decommissioning according to best practice and in consultation with relevant stakeholders as required in recommended ministerial Condition 7.

5. Recommended conditions

Having considered the information provided in this report, the EPA has developed a set of conditions which the EPA recommends be imposed if the proposal by Aurora Algae Pty Ltd to develop a commercial-scale algae farm and processing facilities is approved for implementation. These conditions are presented in Appendix 2.

6. Conclusions

The EPA has considered the proposal Aurora Algae Pty Ltd to develop a commercial-scale algae farm and processing facilities near Karratha.

The EPA notes that the proponent significantly amended the proposal during the environmental impact assessment process, to reduce potential marine environmental impacts.

The EPA has concluded that the proposal can be managed to meet the EPA's environmental objectives, provided there is satisfactory implementation by the proponent of the recommended conditions set out in Appendix 2.

7. Recommendations

The EPA submits the following recommendations to the Minister for Environment:

1. that the Minister notes that the proposal being assessed is for the development of a commercial-scale algae farm and processing facilities near Karratha;
2. that the Minister considers the report on the key environmental factors as set out in Section 4;
3. that the Minister notes that the EPA has concluded that the proposal can be managed to meet the EPA's environmental objectives, provided there is satisfactory implementation by the proponent of the recommended conditions set out in Appendix 2; and
4. that the Minister imposes the conditions and procedures recommended in Appendix 2 of this report.

Appendix 1

References

1. Aurora (2013). *Aurora Algae Pty Ltd Algae farm and Processing Facilities Karratha, Assessment on Proponent Information*. April 2013.

2. EPA (2009) Environmental Assessment Guideline 3 - *Protection of Benthic Primary Producer habitats in Western Australia's Marine Environment.* Environmental Protection Authority of Western Australia, 2009.

3. GHD (2010) *Report for Karratha Potential Groundwater Supply – Desktop Hydrological Assessment*, GHD Pty Ltd, July 2010.

4. GHD (2010a) *Report for Maitland Industrial Estate, Environmental Appraisal,* GHD Pty LTD, September 2010.

5. MWH (2012) *Report – Maitland Commercial Facility - Seawater Intake Report* Prepared for Aurora Algae Inc, MWH, 16 February 2012.

6. US EPA (2001) *National Pollutant Discharge Elimination System: Regulations addressing cooling water intake structures for new facilities*. United States Environmental Protection Authority, Federal Register / Vol. 66, No 243.

Appendix 2

Identified Decision-making Authorities
and
Recommended Environmental Conditions

Identified Decision-making Authorities

Section 44(2) of the *Environmental Protection Act 1986* (EP Act) specifies that the EPA's report must set out (if it recommends that implementation be allowed) the conditions and procedures, if any, to which implementation should be subject. This Appendix contains the EPA's recommended conditions and procedures.

Section 45(1) requires the Minister for Environment to consult with decision-making authorities, and if possible, agree on whether or not the proposal may be implemented, and if so, to what conditions and procedures, if any, that implementation should be subject.

The following decision-making authorities have been identified for this consultation:

Decision making authority	**Approval**
1. Department of Environment and Conservation	Works Approval and licence
2. Department of Fisheries	Aquaculture Licence
3. Shire of Roebourne	Planning approval
4. Minister for Aboriginal Affairs	*Aboriginal Heritage Act 1972* – s18 approval
5. Minister for Lands	*Land Administration Act*
6. Minister for Environment	*Wildlife Conservation Act 1950*

Note: In this instance, agreement is only required with DMAs #4, 5 and 6 since these DMAs are Ministers.

Statement No. XXX

RECOMMENDED ENVIRONMENTAL CONDITIONS

STATEMENT THAT A PROPOSAL MAY BE IMPLEMENTED
(PURSUANT TO THE PROVISIONS OF THE
ENVIRONMENTAL PROTECTION ACT 1986)

ALGAE FARM AND PROCESSING FACILITIES, KARRATHA

Proposal: The proposal is to construct and operate an Algae farm and processing facilities near Karratha in the Shire of Roebourne.

Proponent: Aurora Algae Pty Ltd
Australian Company Number 141 400 884

Proponent Address: Level 3,
679 Murray Street
WEST PERTH WA 6872

Assessment Number: 1857

Report of the Environmental Protection Authority Number: 1XXX

This Statement authorises the implementation of the Proposal described and documented in Table 2 of Schedule 1. The implementation of the Proposal is subject to the following implementation conditions and procedures and Schedule 2 details definitions of terms and phrases used in the implementation conditions and procedures.

1 Proposal Implementation

1-1 When implementing the proposal, the proponent shall not exceed the authorised extent of the proposal as defined in Table 2 in Schedule 1, unless amendments to the proposal and the authorised extent of the Proposal has been approved under the EP Act.

2 Contact Details

2-1 The proponent shall notify the 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 for Proposal Implementation

3-1 The proponent shall not commence implementation of the proposal after the expiration of 5 years from the date of this statement, and any commencement, within this 5 year period, must be substantial.

3-2 Any commencement of implementation of the proposal, within 5 years from the date of this statement, must be demonstrated as substantial by providing the CEO with written evidence, on or before the expiration of 5 years from the date of this statement.

4 Compliance Reporting

4-1 The proponent shall prepare and maintain a compliance assessment plan to the satisfaction of the CEO.

4-2 The proponent shall submit to the CEO the compliance assessment plan required by Condition 4-1 at least six months prior to the first compliance assessment report required by Condition 4-6, or prior to implementation, whichever is sooner.

The compliance assessment plan shall indicate:

(1) the frequency of compliance reporting;

(2) the approach and timing of compliance assessments;

(3) the retention of compliance assessments;

(4) the method of reporting of potential non-compliances and corrective actions taken;

(5) the table of contents of compliance assessment reports; and

(6) public availability of compliance assessment reports.

4-3 The proponent shall assess compliance with conditions in accordance with the compliance assessment plan required by Condition 4-1.

4-4 The proponent shall retain reports of all compliance assessments described in the compliance assessment plan required by Condition 4-1 and shall make those reports available when requested by the CEO.

4-5 The proponent shall advise the CEO of any potential non-compliance within seven days of that non-compliance being known.

4-6 The proponent shall submit to the CEO the first compliance assessment report 15 months from the date of issue of this Statement addressing the 12 month period from the date of issue of this Statement and then annually from the date of submission of the first compliance assessment report.

The compliance assessment report shall:

(1) be endorsed by the proponent's Chief Executive Officer or a person delegated to sign on the Chief Executive Officer's behalf;

(2) include a statement as to whether the proponent has complied with the conditions;

(3) identify all potential non-compliances and describe corrective and preventative actions taken;

(4) be made publicly available in accordance with the approved compliance assessment plan; and

(5) indicate any proposed changes to the compliance assessment plan required by Condition 4-1.

5 Public Availability of Data

5-1 Subject to Condition 5-2, within a reasonable time period approved by the CEO of the issue of this statement 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 Statement.

5-2 If any data referred to in Condition 5-1 contains particulars of:

(1) a secret formula or process; or

(2) confidential commercially sensitive information;

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

6 Inland Waters Environmental Quality

6-1 The proponent shall ensure that leakage from the evaporation ponds and the algae ponds associated with the proposal is managed to protect the environmental values, both ecological and social, associated with groundwater in the local area.

6-2 To ensure that the requirements of Condition 6-1 are met, the proponent shall implement the monitoring and management actions related to groundwater as described within the document *Algae Farm and Processing facilities, Karratha, Assessment on Proponent Information* (April 2013), or any revisions as approved by the CEO and continue implementation until otherwise agreed by the CEO.

6-3 In the event that monitoring pursuant to Condition 6-2 indicates that the requirements of Condition 6-1 are not being met, the proponent shall immediately implement contingency actions as described in *Algae Farm and Processing facilities, Karratha, Assessment on Proponent Information* (April 2013) or other contingency actions as agreed by the CEO until groundwater quality is returned to an acceptable level as agreed by the CEO.

7 Decommissioning

7-1 At least one year prior to the closure and decommissioning of the project, the proponent shall submit to the CEO a decommissioning plan prepared to the satisfaction of the CEO which details the following:

(1) a description of the existing infrastructure associated with the proposal; and

(2) information demonstrating how infrastructure will be removed and/or decommissioned in accordance with current best practice and in consultation with appropriate stakeholders.

7-2 The proponent shall implement the decommissioning plan required by condition 7-1 or its revisions as approved by the CEO.

Schedule 1

Table 1: Summary of the Proposal

Proposal Title	Algae Farm and Processing Facilities, Karratha
Short Description	The proponent proposes to construct and operate an Algae farm and processing facilities near Karratha in the Shire of Roebourne. The project includes a seawater intake and associated pipeline to the project area, algae ponds, evaporation ponds, processing equipment (including a reverse osmosis desalination plant), and storage areas for hazardous materials.

Table 2: Location and authorised extent of physical and operational elements

Column 1	Column 2	Column 3
Element	**Location**	**Authorised Extent**
Algae Farm	Figure 1	Clearing no more than 470 hectares within the 610 hectare Algae farm development envelope
Seawater pipeline and associated infrastructure	Figure 1	Clearing no more than 35 hectares within the Pipeline development envelope
	Figure 1 (Intake Point)	Excavation as required to maintain a deepened area of no more than 2 metres below the natural bed of the creek over an area of no more than 400 square metres. Excavated material to be removed off site.
Seawater intake velocity		No more than 0.15 metres per second

Figure 1 - Algae farm and seawater pipeline development envelopes

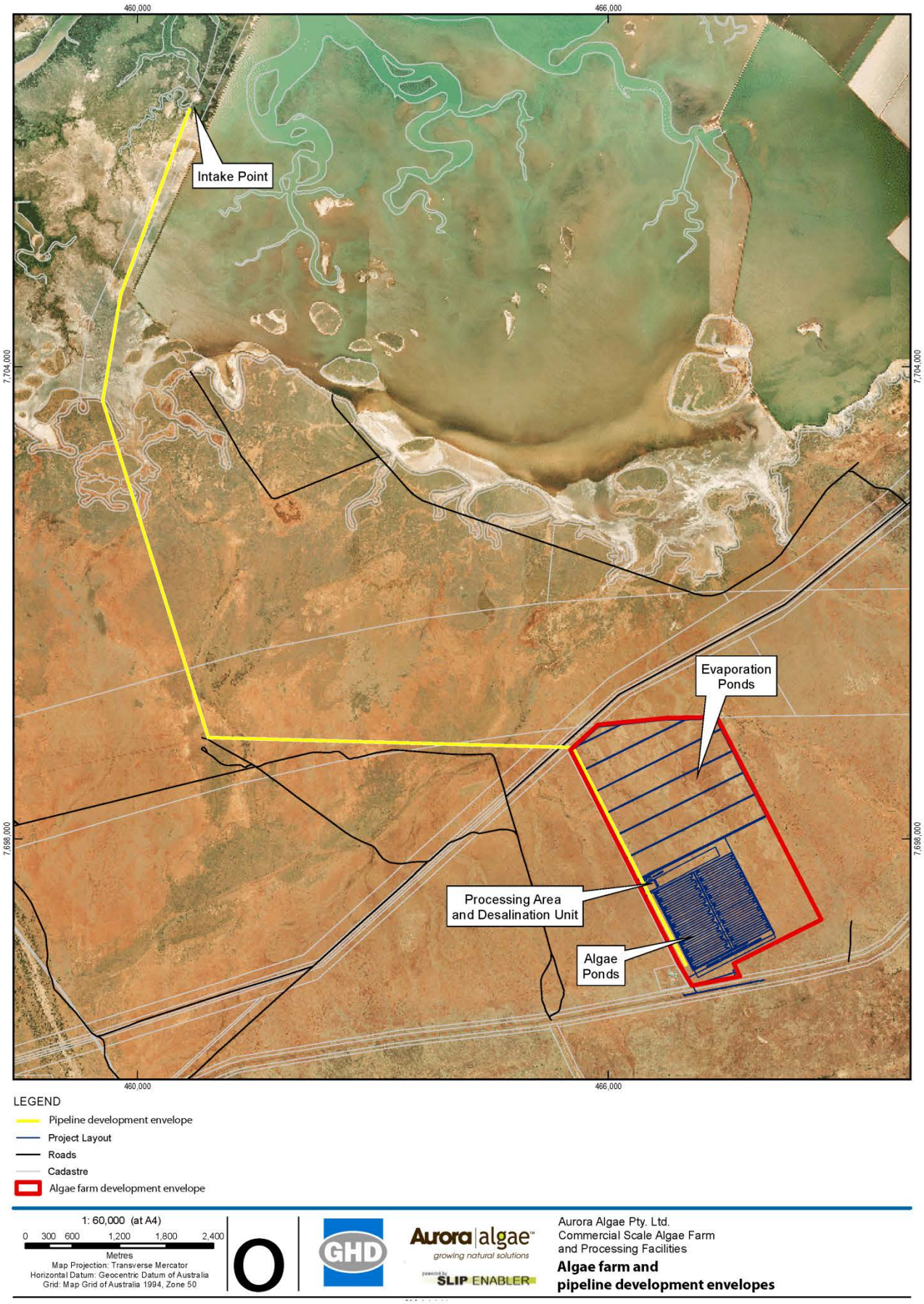

Figure 1 - Algae farm and seawater pipeline development envelopes

Schedule 2

Term or Phrase	Definition
CEO	The Chief Executive Officer of the Department of the Public Service of the State responsible for the administration of section 48 of the *Environmental Protection Act 1986*, or his delegate.
EPA	Environmental Protection Authority
EP Act	*Environmental Protection Act 1986*

Schedule 3

COMMERCIAL SCALE ALGAE FARM AND PROCESSING FACILITIES KARRATHA

Coordinates that define the Development Envelope

Coordinates defining the Development Envelope as shown in Figure 1 of the Ministerial statement are held by the Office of the EPA.

Notes

The following notes are provided for information and do not form a part of the implementation conditions of the Statement:

- The proponent for the time being nominated by the Minister for Environment under section 38(6) of the *Environmental Protection Act 1986* is responsible for the implementation of the proposal unless and until that nomination has been revoked and another person is nominated.
- If the person nominated by the Minister, ceases to have responsibility for the proposal, that person is required to provide written notice to the Environmental Protection Authority of its intention to relinquish responsibility for the proposal and the name of the person to whom responsibility for the proposal will pass or has passed. The Minister for Environment may revoke a nomination made under section 38(6) of the *Environmental Protection Act 1986* and nominate another person.
- To initiate a change of proponent, the nominated proponent and proposed proponent are required to complete and submit *Post Assessment Form 1 – Application to Change Nominated Proponent*.
- The General Manager of the Office of the Environmental Protection Authority was the Chief Executive Officer of the Department of the Public Service of the State responsible for the administration of section 48 of the *Environmental Protection Act 1986* at the time the Statement was signed by the Minister for Environment.