MINISTER FOR THE ENVIRONMENT

Statement No.

000648

STATEMENT TO AMEND CONDITIONS APPLYING TO PROPOSALS (PURSUANT TO THE PROVISIONS OF SECTION 46 OF THE ENVIRONMENTAL PROTECTION ACT 1986)

KWINANA AMMONIA PROJECT, KWINANA INDUSTRIAL AREA
(Including Storage*, Import* and Export of Ammonia)

Note: Asterisks indicate that these components have been included from the PROPOSED AMMONIA-UREA PLANT AT KWINANA (Statement Nos. 034 and 647)

Proponent: CSBP Limited

Proponent Address: PO Box 345, Kwinana WA 6966

Assessment Number: 1492

Previous Assessment Numbers: 020, 1140, 1468 and 1469

Previous Statement Numbers: Statement No. 034 published on 2 August 1988,
Statement No. 470 published on 18 March 1998,
Statement No. 624 published on 16 May 2003, and
Statement No. 647 published on 13 April 2004.

Report of the Environmental Protection Authority: Bulletin 1125

Previous Reports of the Environmental Protection Authority: Bulletins 309, 882 and 1094.

The above proposals, with the exception of the manufacture of ammonia-urea (as referred to in Ministerial Statement No. 647 – See note 3 at the foot of this statement), are now subject to the following conditions and procedures which consolidate and replace all previous conditions and procedures relating to ammonia production, storage and import/export:

1 Implementation

1-1 The proponent shall implement the proposals as documented in schedule 1 of this statement subject to the conditions of this statement.

Published on
30 APR 2004

2 Proponent Commitments

2-1 The proponent shall implement the environmental management commitments documented in schedule 2 of this statement.

3 Proponent Nomination and Contact Details

3-1 The proponent for the time being nominated by the Minister for the Environment under section 38(6) or (7) of the *Environmental Protection Act 1986* is responsible for the implementation of the proposals until such time as the Minister for the Environment has exercised the Minister's power under section 38(7) of the Act to revoke the nomination of that proponent and nominate another person as the proponent for the proposals.

3-2 If the proponent wishes to relinquish the nomination, the proponent shall apply for the transfer of proponent and provide a letter with a copy of this statement endorsed by the proposed replacement proponent that the proposals will be carried out in accordance with this statement. Contact details and appropriate documentation on the capability of the proposed replacement proponent to carry out the proposals shall also be provided.

3-3 The nominated proponent shall notify the Department of Environmental Protection of any change of contact name and address within 60 days of such change.

4 Commencement and Time Limit of Approval

4-1 The proponent shall substantially commence the modified proposals within four years of the date of this statement or the approvals granted in the statements published on 2 August 1988 and 18 March 1998 shall lapse and be void.

Note: The Minister for the Environment will determine any dispute as to whether the proposals have been substantially commenced.

4-2 The proponent shall make application for any extension of approval for the substantial commencement of the modified proposals beyond four years from the date of this statement to the Minister for the Environment, prior to the expiration of the four-year period referred to in condition 4-1.

The application shall demonstrate that:

1. the environmental factors of the proposals have not changed significantly;
2. new, significant, environmental issues have not arisen; and
3. all relevant government authorities have been consulted.

Note: The Minister for the Environment may consider the grant of an extension of the time limit of approval not exceeding five years for the substantial commencement of the modified proposals.

5 Compliance Audit and Performance Review

5-1 The proponent shall prepare an audit program and submit compliance reports to the Department of Environmental Protection which address:

1. the status of implementation of the proposals as defined in schedule 1 of this statement;

2. evidence of compliance with the conditions and commitments; and

3. the performance of the environmental management plans and programs.

Note: Under sections 48(1) and 47(2) of the *Environmental Protection Act 1986*, the Chief Executive Officer of the Department of Environmental Protection is empowered to audit the compliance of the proponent with the statement and should directly receive the compliance documentation, including environmental management plans, related to the conditions, procedures and commitments contained in this statement.

5-2 The proponent shall submit a performance review report every five years after the start of operations (August 2000), to the requirements of the Minister for the Environment on advice of the Environmental Protection Authority, which addresses:

1. the major environmental issues associated with the project; the targets for those issues; the methodologies used to achieve these; and the key indicators of environmental performance measured against those targets;

2. the level of progress in the achievement of sound environmental performance over the last five years, including industry benchmarking, and the use of best available technology where practicable;

3. significant improvements gained in environmental management, including the use of external peer reviews where appropriate;

4. stakeholder and community consultation about environmental performance and the outcomes of that consultation, including a report of any on-going concerns being expressed; and

5. the proposed environmental targets over the next five years, including improvements in technology and management processes.

6 Decommissioning Plans

6-1 Prior to construction, the proponent shall prepare a Preliminary Decommissioning Plan, which provides the framework to ensure that the site is left in an environmentally acceptable condition to the requirements of the Minister for the Environment on advice of the Environmental Protection Authority.

The Preliminary Decommissioning Plan shall address:

1. rationale for the siting and design of plant and infrastructure as relevant to environmental protection, and conceptual plans for the removal or, if appropriate, retention of plant and infrastructure;

2. a conceptual rehabilitation plan for all disturbed areas and a description of a process to agree on the end land use(s) with all stakeholders;

3. a conceptual plan for a care and maintenance phase; and

4. management of noxious materials to avoid the creation of contaminated areas.

6-2 At least six months prior to the anticipated date of decommissioning, or at a time agreed with the Environmental Protection Authority, the proponent shall prepare a Final Decommissioning Plan designed to ensure that the site is left in an environmentally acceptable condition to the requirements of the Minister for the Environment on advice of the Environmental Protection Authority.

The Final Decommissioning Plan shall address:

1. removal or, if appropriate, retention of plant and infrastructure in consultation with relevant stakeholders;

2. rehabilitation of all disturbed areas to a standard suitable for the agreed new land use(s); and

3. identification of contaminated areas, including provision of evidence of notification and proposed management measures to relevant statutory authorities.

6-3 The proponent shall implement the Final Decommissioning Plan required by condition 6-2 until such time as the Minister for the Environment determines, on advice of the Environmental Protection Authority, that the proponent's decommissioning responsibilities have been fulfilled.

6-4 The proponent shall make the Final Decommissioning Plan required by condition 6-2 publicly available, to the requirements of the Minister for the Environment on advice of the Environmental Protection Authority.

7 Work Practices

7-1 Prior to commencement of construction, the proponent shall submit a written prescription for contractor work practices in relation to environmental protection, covering plant and pipeline construction and operation, to ensure that work practices are carried out at the level of international best practice, to the requirements of the Minister for the Environment on advice of the Environmental Protection Authority.

7-2 The proponent shall ensure that the prescription of work practices required by condition 7-1 is implemented, to the requirements of the Minister for the Environment on advice of the Environmental Protection Authority.

Procedures

1 Where a condition states "to the requirements of the Minister for the Environment on advice of the Environmental Protection Authority", the Environmental Protection Authority will provide that advice to the Department of Environmental Protection for the preparation of written notice to the proponent.

2 The Environmental Protection Authority may seek advice from other agencies or organisations, as required, in order to provide its advice to the Department of Environmental Protection.

Notes

1 The Minister for the Environment will determine any dispute between the proponent and the Environmental Protection Authority or the Department of Environmental Protection over the fulfilment of the requirements of the conditions.

2 A Works Approval and Licence are required for this project under the provisions of Part V of the *Environmental Protection Act 1986*.

3 The conditions applicable to the manufacture of ammonia-urea have been amended under Section 46 of the *Environmental Protection Act 1986* and issued as a separate statement (Statement No. 647, Proposed Ammonia-urea Plant at Kwinana, April 2004).

Judy Edwards

Dr Judy Edwards MLA
MINISTER FOR THE ENVIRONMENT

30 APR 2004

PROPOSALS

Schedule 1

The ammonia plant is located immediately to the east of the old ammonia plant at the CSBP site, within the Kwinana Industrial Area (attached Figures 1 and 2).

The ammonia project involves construction and operation of:

- a 650 tonnes per day (or 225,000 tonnes per annum) ammonia plant which will be "debottlenecked" to produce approximately 750 tpd (or approximately 275 000 tpa) of ammonia; and
- ancillary equipment to support the ammonia plant including:
  - installation of a 25 tonne per hour (tph) natural gas fuelled steam boiler for use during plant start-up and shutdown operations;
  - "polishing water unit" to produce boiler quality feed water by treating demineralised water from an existing CSBP water treatment plant; and
  - a cooling water tower.

The plant is integrated with a number of existing CSBP facilities during its operation (attached Figure 3).

This project includes import and export of ammonia through the Kwinana Ammonia Terminal, but does not include the transport and distribution of ammonia throughout the State. The layout of the components of the plant is shown in Figure 4 (attached).

The general arrangement of the plant includes the following sections:

1 reforming;

2 synthesis loop;

3 carbon dioxide removal;

4 heat exchange/cooling;

5 water polishing unit;

6 ammonia synthesis;

7 power generation;

8 process and motor control centre;

9 refrigeration;

10 groundwater bore; and

11 storage.

The main characteristics of the proposal are summarised in Table 1 (attached). The ammonia plant incorporates the Haldor Topsøe technology, for which a licence was made available to CSBP by Technipetrol SpA of Italy.

The process flow diagram (attached Figure 5) shows various stages of the ammonia production process, which include:

1 desulphurisation of natural gas feed (methane);

2 reforming of methane and steam to carbon monoxide and hydrogen;

3 shift conversion of carbon monoxide to carbon dioxide;

4 removal of carbon dioxide by absorption;

5 purification of "synthesis gas" by methanation;

6 compression of the "synthesis gas";

7 synthesis of ammonia from "synthesis gas"; and

8 refrigeration and storage of ammonia.

The old ammonia plant will be dismantled in due course.

PROPOSAL TABLE AND FIGURES (Assessment No. 1492)

Table 1 - Key Proposal Characteristics

Proposal Characteristics	Unit	Ammonia Plant (including storage and import/export)
Capacity	tonnes per day NH_3 tonnes per annum NH_3	~750 nominal ~275,000 nominal
Natural Gas Consumption	Gigajoules/tonne NH_3 Petajoules/year	32 – 35 8.7 – 9.3
Water Consumption	tonnes per day	up to 6,000 (make-up) dependant on source
Location	-	CSBP Kwinana
Gaseous emissions: NO_x (as NO_2)	kilograms/tonne NH_3 kilograms/day	0.374 350
CO_2	tonnes/tonne NH_3 tonnes per day	1.8 1,400
Fugitive Gases:- • NH_3 • H_2	 - -	 flared flared
Aqueous discharge: Cooling System (including polishing unit blowdown)	-	recirculating treated sub-artesian water and/or superficial aquifer and/or Kwinana Wastewater Recycling Plant and/or scheme water
Flow Heat Load	tonnes per day -	up to 2,100 depending on source mainly to atmosphere
Nitrogen Phosphorus	kilograms/day kilograms/day	6 - 10 6
Oily water	-	de-oiled to contain less than 30 parts per million of oil
Noise at boundaries	59 dB(A) at BP boundary	will comply with regulations
Ammonia storage	No.1 tank No. 2 tank	10,000 tonnes 30,000 tonnes

Ammonia transfers (import/export) through the Kwinana Ammonia Terminal	Transfers per calendar year	Maximum of 9 transfers

Figures (attached)

Figure 1 – Location map
Figure 2 – Ammonia plant location
Figure 3 – Project integration with existing CSBP facilities
Figure 4 – Ammonia plant layout
Figure 5 – Process flow chart

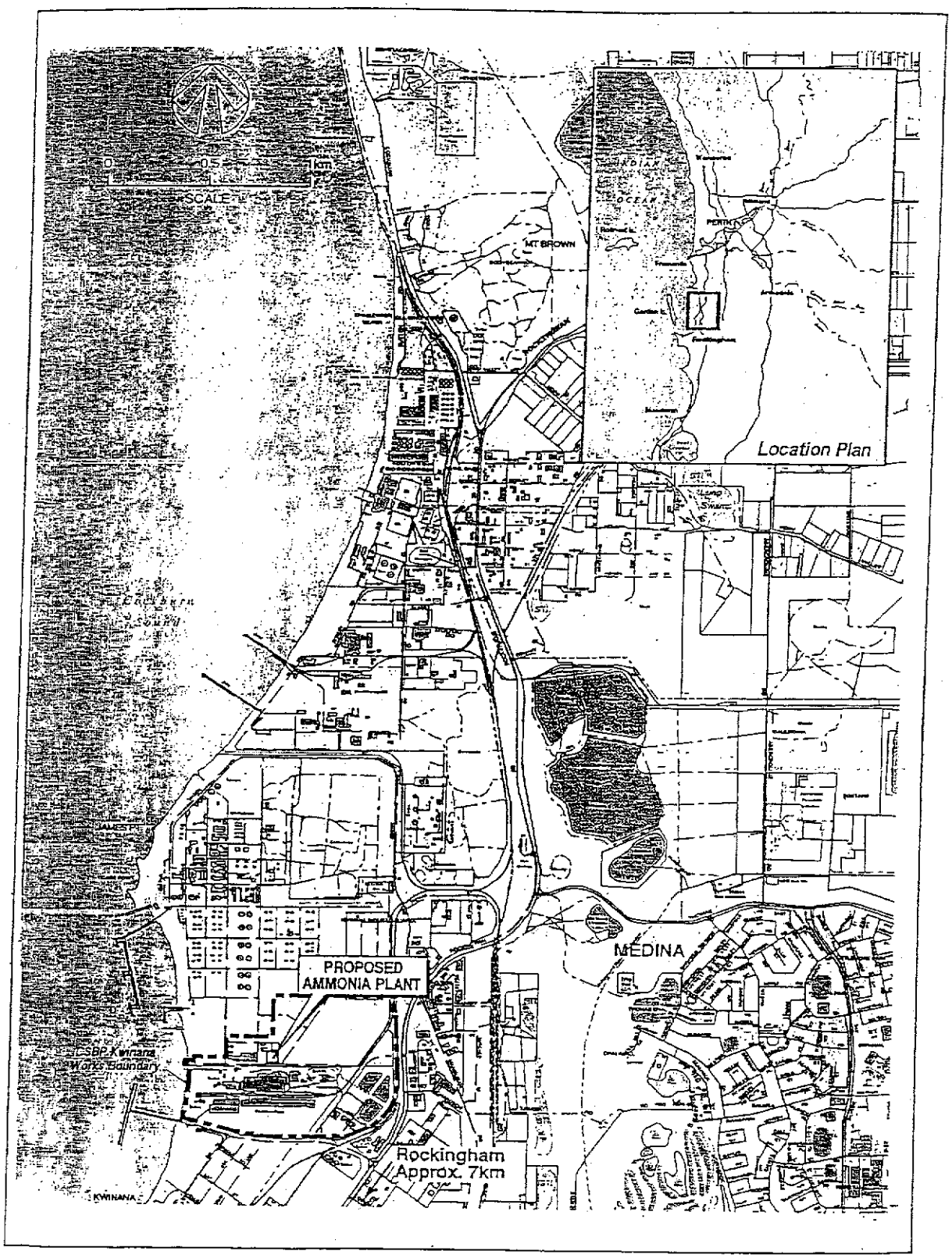


Figure 1. Location map.

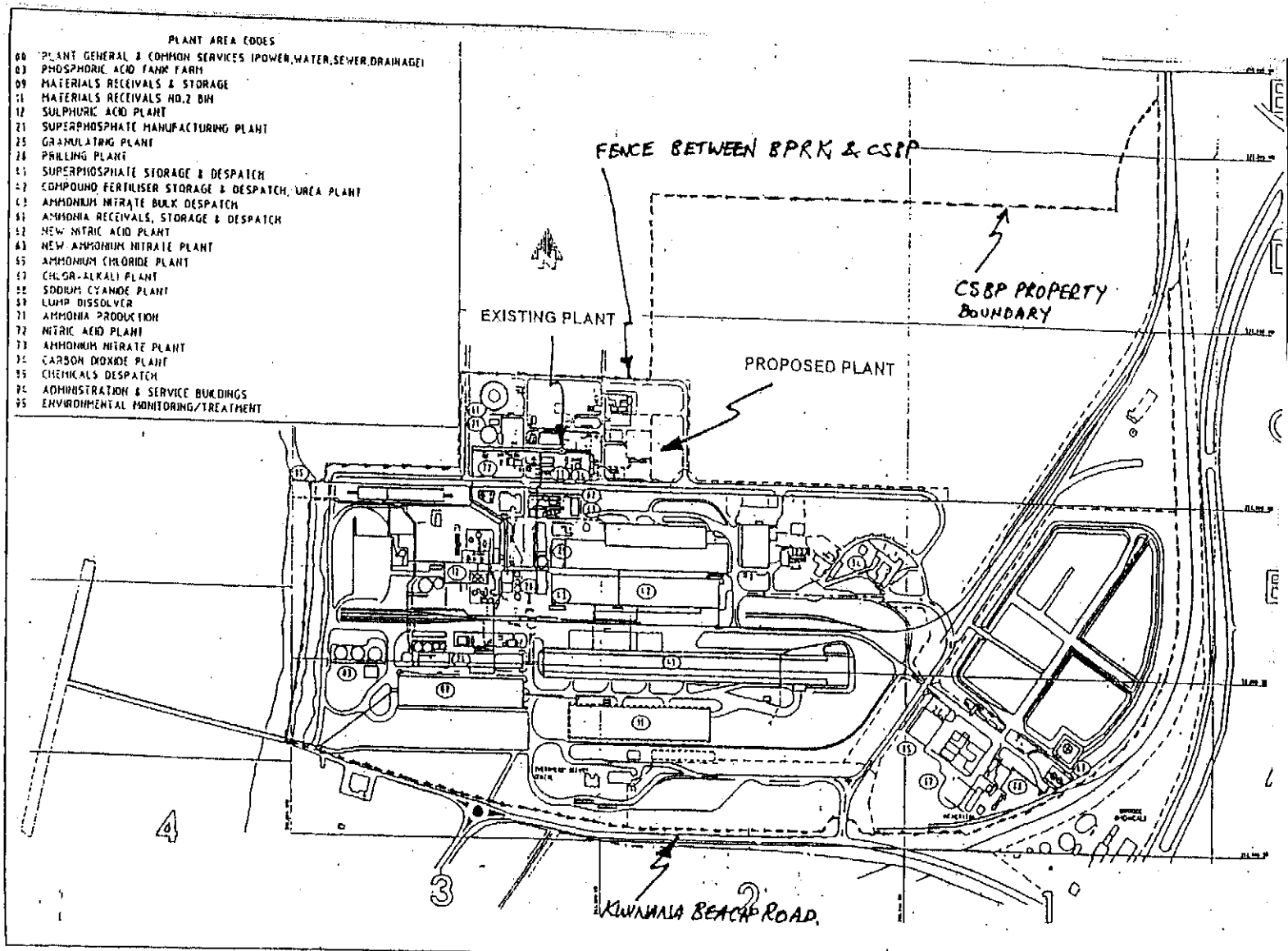
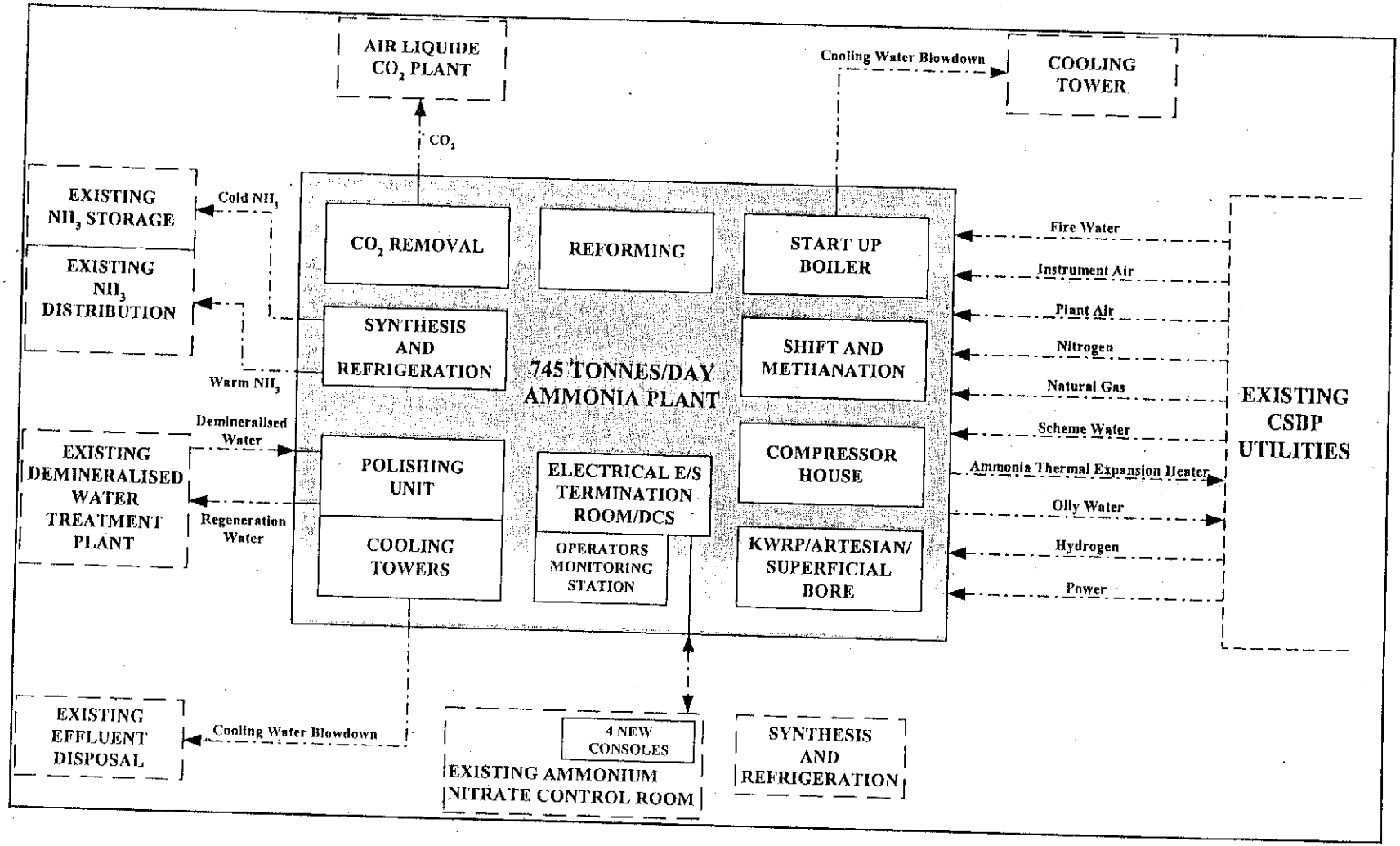


Figure 2. Proposed ammonia plant location.



PROJECT INTEGRATION WITH EXISTING CSBP FACILITIES

Figure 3

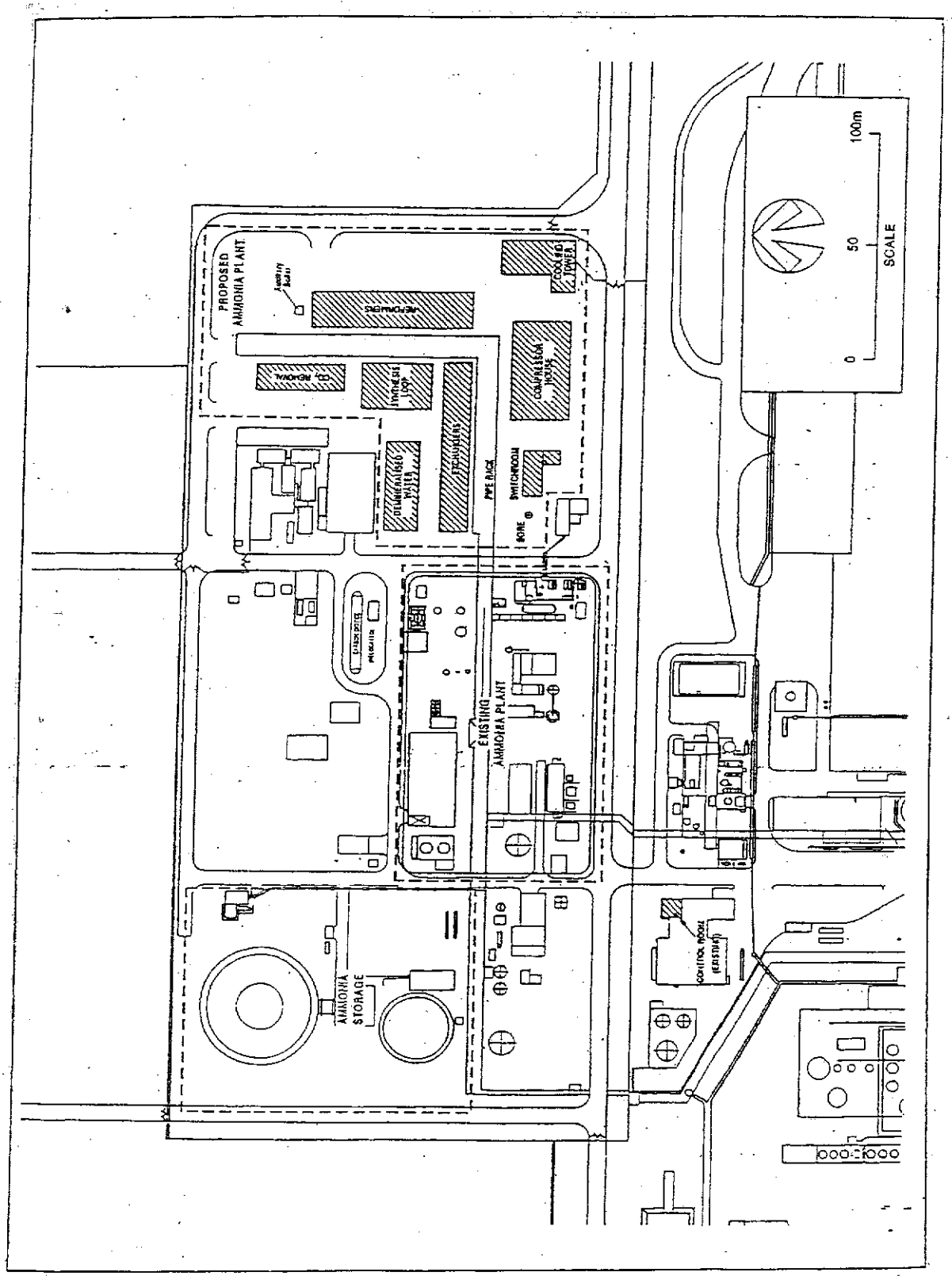
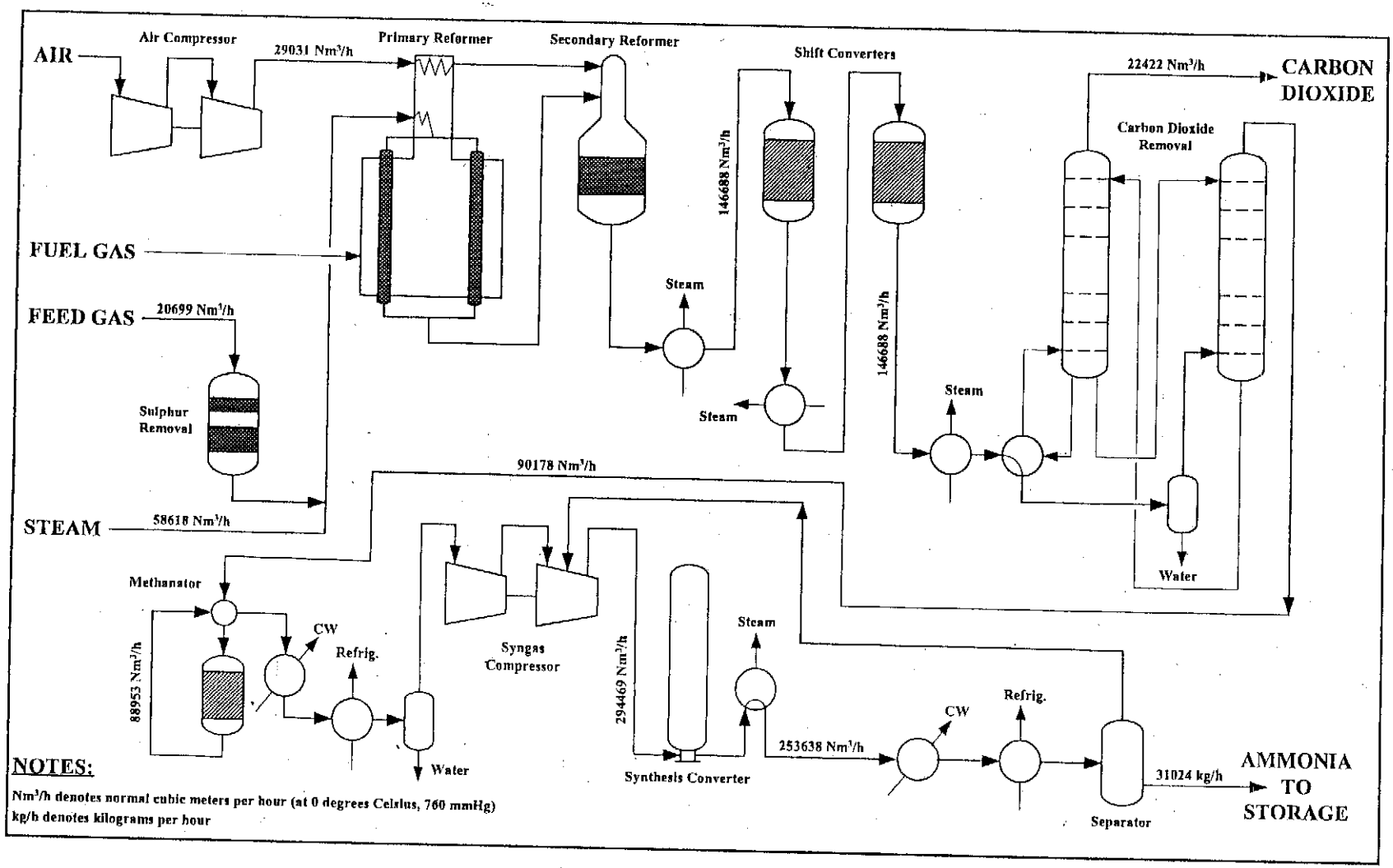


Figure 4. Proposed ammonia plant layout.



PROCESS FLOW CHART
Figure 5

Schedule 2

Proponent's Consolidated Environmental Management Commitments

26 March 2003

KWINANA AMMONIA PROJECT
KWINANA INDUSTRIAL AREA
(Assessment Nos 1468/1492)

CSBP LIMITED

SCHEDULE 2

KWINANA AMMONIA PROJECT, KWINANA INDUSTRIAL AREA (Including Storage, Import and Export of Ammonia) – 26 March 2003 (Assessment Nos 1468/1492)

Note: The term "commitment" as used in this schedule includes the entire row of the table and its six separate parts as follows:

- a commitment and number;
- the objective of the commitment;
- the "action" to be undertaken by the proponent;
- the timing requirements of the commitment;
- the body/agency to provide technical advice to the Department of Environmental Protection; and
- the measurement/compliance criteria.

COMMITMENT	OBJECTIVE	ACTION	TIMING	WHOSE ADVICE	MEASUREMENT/ COMPLIANCE CRITERIA
1. Minimize the impacts of discharges of phosphorus and nitrogen from the plant.	To protect the biota and amenity of Cockburn Sound.	• By selecting processes and equipment which give rise to the lowest discharges of nitrogen and phosphorus. (The selection of cooling water treatment process is of particular significance). • By continuing the implementation of measures to reduce discharges from other sources on CSBP's Kwinana site.	• Before construction • By 1 January 2000		• Confirmation of advice on expected nitrogen and phosphorus discharges contained in the CER. • Monitoring and reporting site discharges as required under current licence conditions
2. Seek to reduce discharges of greenhouse gases from the plant.	To minimize the effects of global warming arising from the discharge of Greenhouse gases to the atmosphere.	• By implementing commercially viable opportunities to recover and reuse CO_2 discharged from the plant. • By incorporating, where practicable, advances in ammonia catalyst technologies which reduce the generation of CO_2 from the production of ammonia.	• Ongoing • Ongoing	Greenhouse Challenge Office (Federal Government).	• Include new ammonia plant in annual reporting of Greenhouse Gas inventories.
3. Ensure that noise generated from the Kwinana Ammonia Project will not exceed current regulations.	To maintain the amenity of nearby industrial, residential and recreational areas.	• By specifying the procurement of equipment which complies with current requirements. • By conducting noise surveys of the operating plant and implementing noise abatement measures if non-compliance is detected.	• Before construction • Within 6 months of commissioning		• Reporting of results of surveys and agreeing plans to achieve attenuation if required.
4. Minimize the risk to the community arising from the operation of the plant.	To protect the nearby communities from exposure to unacceptable levels of risk to health and safety.	• By preparing and implementing a comprehensive Safety Management System (SMS) for the operation of the plant. • By incorporating risk reduction measures recommended by Quantarisk into plant design.	• Before commissioning • Completed as at 1/1/1998	DoIR	• Approval of the SMS** by relevant authorities. • Regular independent audit of compliance with the SMS** reported to the DoIR.

COMMITMENT	OBJECTIVE	ACTION	TIMING	WHOSE ADVICE	MEASUREMENT/ COMPLIANCE CRITERIA
5. Minimize the risk to persons involved in construction of the plant from the operation of adjacent plants on the Kwinana site.	To protect the health and well being of people employed in the construction of the plant.	• By preparing and implementing a Construction Safety Management Plan.	• Before construction	DoIR	• Auditing and reporting as required by the plan.
6. Revise the preliminary risk assessment for the project.	To demonstrate compliance with EPA criteria at fenceline with BP and reduction of cumulative risk level for whole CSBP site.	• Revise preliminary risk assessment and include knock-on effects, loss of control releases, mitigation measures to meet ALARP*, sensitivity analysis with respect to probit equations and weather data.	• Before construction	DoIR	• The EPA's criteria for individual fatality risk off-site.
7. Conduct a final quantified risk assessment on the project.	To confirm that the final plant design meets EPA risk criteria and that there is a reduction in risk for the whole CSBP site.	• Conduct final risk assessment taking into account final plant design.	• Before commissioning	DoIR	• The EPA's criteria for individual fatality risk off-site.
8. Decommission the existing ammonia plant, following commissioning and stabilisation of the new plant.	To ensure that decommissioning is carried out in an environmentally acceptable manner.	• Prepare and implement a Decommissioning Management Plan.	• At least 6 months before decommissioning		• The EPA's requirement.
9. Limit ammonia import/export operations to no more than 9 transfers per annum.	To protect nearby industry, public recreation areas and communities from unacceptable safety impacts.	• Ensure effective testing and maintenance procedures in line with the SMS • Include in the Ammonia Safety Report	• Ongoing	DoIR	• No more than 9 operations in a calendar year.

LEGEND

- As Low As Reasonably Practicable.
* - Safety Management System.
- Ammonia Import/Export Sensitivity Analysis, Det Norske Veritas, January 2003

CER – Consultative Environmental Review
DoIR – Department of Industry and Resources
EPA – Environmental Protection Authority
SMS – Safety Management System

Attachment 1 to Ministerial Statement 648

Change to proposal under s45C of the *Environmental Protection Act 1986*

Proposal: Kwinana Ammonia Project, Kwinana Industrial Area

Proponent: CSBP Limited

Change: Revised Proposal description; amendments to elements in the Key Characteristics table relating to 'Gaseous Emissions', 'Natural Gas Consumption' and 'Ammonia Transfers'; and removal of characteristics managed by other regulatory authorities

Proposal

The ammonia plant is located immediately to the east of the old ammonia plant at the CSBP site, within the Kwinana Industrial Area (Schedule 1, Figures 1 and 2).

The ammonia project involves construction and operation of:

- a 650 tonnes per day (or 225,000 tonnes per annum) ammonia plant which will be "debottlenecked" to produce approximately 750 tpd (or approximately 275,000 tpa) of ammonia; and
- ancillary equipment to support the ammonia plant including:
  - installation of a 25 tonne per hour (tph) natural gas fuelled steam boiler for **continuous** use;
  - "polishing water unit" to produce boiler quality feed water by treating demineralised water from an existing CSBP water treatment plant; and
  - a cooling water tower.

The plant is integrated with a number of existing CSBP facilities during its operation (Fig 3 of Schedule 1).

This project involves import and export of ammonia through the Kwinana Ammonia Terminal, but does not include the transport and distribution of ammonia throughout the State. The layout of the components of the plant is shown in Figure 4 of Schedule 1.

Key Characteristics Table: This table replaces Table 1 in Schedule 1

Element	Description	Description of approved change to proposal
Capacity	750 tonnes/day NH_3 nominal 275,000 tonnes/yr NH_3 nominal	750 tonnes/day NH_3 275,000 tonnes/yr NH_3
Natural Gas Consumption	32-35 Gigajoules/tonne NH_3 8.7-9.3 Petajoules/yr	32-35 Gigajoules/tonne NH_3 **9.9 Petajoules/yr**
Water Consumption	Up to 6,000 (make-up) tonnes/day dependent on source	Up to 6,000 (make-up) tonnes/day dependent on source
Location	CSBP Kwinana	**Deleted as included in proposal description**
Gaseous Emissions		
NOx (as NO_2)	0.374 kilograms/tonne NH_3 350 kilograms/day	**Removed as managed by other regulatory authorities**
CO_2	1.8 tonnes/tonne NH_3 1,400 tonnes/day	**Removed as inconsistent with the *Clean Energy Act 2011***
Fugitive Gases: • NH_3 • H_2	 Flared Flared	**Removed as managed by other regulatory authorities**
Aqueous Discharge		
Cooling system (including polishing unit blowdown)	Recirculating treated sub-artesian water and/or superficial aquifer and/or Kwinana Wastewater Recycling Plant and/or scheme water	Recirculating treated sub-artesion water and/or superficial aquifer and/or Kwinana Wastewater Recycling Plant and/or scheme water
Flow	Up to 2,100 tonnes/day depending on source	Up to 2,100 tonnes/day depending on source
Heat Load	Mainly to atmosphere	Mainly to atmosphere
Nitrogen Phosphorus	6-10 kilograms/day 6 kilograms/day	6-10 kilograms/day 6 kilograms/day
Oily water	de-oiled to contain less than 30 ppm of oil	de-oiled to contain less than 30 ppm of oil
Noise at boundaries	59 dB(A) at BP Boundary	59 dB(A) at BP Boundary

Ammonia storage No. 1 Tank No. 2 Tank	 10,000 tonnes 30,000 tonnes	 10,000 tonnes 30,000 tonnes
Ammonia transfers (import/export) through the Kwinana Ammonia Terminal	Maximum of 9 transfers per calendar year	**Removed as managed by other regulatory authorities**

Note: Text in **bold** in the Proposal and Key Characteristics Table, indicates changes to the proposal.

HON BILL MARMION MLA
MINISTER FOR ENVIRONMENT; WATER

Approval date: 3 January 2013

Attachment 2 to Ministerial Statement 648

Change to proposal approved under section 45C of the *Environmental Protection Act 1986*

This Attachment replaces Table 1 in Schedule 1 and Attachment 1 of Ministerial Statement 648

Proposal: Kwinana Ammonia Project, Kwinana Industrial Area

Proponent: CSBP Limited

Changes:

Remove reference to:

- nitrogen and phosphorus under aqueous discharge,
- noise at boundaries,
- natural gas consumption,
- oily water under aqueous discharge, and
- heat load under aqueous discharge.

Summary of the Proposal

The ammonia plant is located immediately to the east of the old ammonia plant at the CSBP site, within the Kwinana Industrial Area (Schedule 1, Figures 1 and 2).

The Ammonia Project involves construction and operation of:

- a 750 tonnes per day (tpd)(or 225,000 tonnes per annum) ammonia plant; and
- ancillary equipment to support the ammonia plant including:
  - installation of a 25 tonne per hour (tph) natural gas fuelled steam boiler for continuous use;
  - "polishing water unit" to produce boiler quality feed water by treating demineralised water from an existing CSBP water treatment plant; and
  - a cooling water tower.

The plant is integrated with a number of existing CSBP facilities during its operation (Fig 3 of Schedule 1).

This project involves import and export of ammonia through the Kwinana Ammonia Terminal, but does not include the transport and distribution of ammonia throughout the State. The layout of the components of the plant is shown in Figure 4 of Schedule 1.

Table 1: Location and authorised extent of physical and operational elements

Element	Previously Authorised Extent	Authorised Extent
Capacity	750 tonnes/day NH_3 275,000 tonnes/yr NH_3	750 tonnes/day NH_3 275,000 tonnes/yr NH_3
Natural Gas Consumption	32-35 Gigajoules/tonne NH_3 9.9 Petajoules/yr	**Removed as not a significant key characteristic relevant to the environment.**
Water Consumption	Up to 6,000 (make-up) tonnes/day dependent on source.	Up to 6,000 (make-up) tonnes/day dependent on source
Aqueous Discharge		
Cooling system (including polishing unit blowdown)	Recirculating treated sub-artesian water and/or superficial aquifer and/or Kwinana Wastewater Recycling Plant and/or scheme water	Recirculating treated sub-artesian water and/or superficial aquifer and/or Kwinana Wastewater Recycling Plant and/or scheme water
Flow	Up to 2,100 tonnes/day depending on source	Up to 2,100 tonnes/day depending on source
Heat Load	Mainly to atmosphere	**Removed as not a significant key characteristic relevant to the environment.**
Nitrogen Phosphorus	6-10 kilograms/day 6 kilograms/day	**Removed as managed under the conditions of Licence issued under Part V of the *Environmental Protection Act* 1986 (EP Act).**
Oily water	de-oiled to contain less than 30 ppm of oil	**Removed as managed under the conditions of Licence issued under Part V of the *Environmental Protection Act* 1986 (EP Act).**
Noise at boundaries	59 dB(A) at BP Boundary	**Removed as managed under the *Environmental Protection (Noise) Regulations 1997.***
Ammonia storage No. 1 Tank No. 2 Tank	 10,000 tonnes 30,000 tonnes	 10,000 tonnes 30,000 tonnes

Note: Text in **bold** in Table 2 indicates a change to the proposal.

Dr Paul Vogel
CHAIRMAN
Environmental Protection Authority
under delegated authority

4.11.14

Attachment 3 to Ministerial Statement 648

Change to proposal approved under section 45C of the
Environmental Protection Act 1986

This Attachment replaces Schedule 1 and all previous Attachments of Ministerial Statement 648

Proposal: **Kwinana Ammonia Project, Kwinana Industrial Area (Including Storage, Import and Export of Ammonia)**

Proponent: **CSBP Limited**

Changes:

- Remove reference to "Capacity" in tonnes per day of NH_3
- Remove reference to "Cooling System including polishing unit blowdown" and "Flow" under the Aqueous Discharge element
- Remove reference to "Flow" under the Aqueous Discharge element
- Update and contemporise Summary of the Proposal in Table 1
- Update Figures

Table 1: Summary of the Proposal

Proposal Title	Kwinana Ammonia Project, Kwinana Industrial Area (Including Storage, Import and Export of Ammonia)
Short Description	The proposal involves the construction and operation of an ammonia plant and the import and export of ammonia through the Kwinana Ammonia Terminal. The proposal does not include the transport and distribution of ammonia throughout the State. The ammonia plant is integrated with a number of existing CSBP facilities located within the Kwinana Industrial Area (Figures 2).

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

Element	Previously Authorised Extent	Authorised Extent
Capacity	750 tonnes/day NH_3	**Removed as not a significant key characteristic relevant to the environment.**
	275,000 tonnes/yr NH_3	275,000 tonnes/yr NH_3
Water Consumption	Up to 6,000 (make-up) tonnes/day dependent on source.	Up to 6,000 (make-up) tonnes/day dependent on source
<u>Aqueous Discharge</u> Cooling system (including polishing unit blowdown)	Recirculating treated sub-artesian water and/or superficial aquifer and/or Kwinana Wastewater Recycling Plan and/or scheme water	**Removed as water quality discharge limits are managed under a Part V Licence issued under the *Environmental Protection Act* (1986).**

Element	Previously Authorised Extent	Authorised Extent
Flow	Up to 2,000 tonnes/day depending on source	**Removed as water quality discharge limits are managed under a Part V Licence issued under the *Environmental Protection Act* (1986).**
Ammonia storage No. 1 Tank No. 2 Tank	 10,000 tonnes 30,000 tonnes	 10,000 tonnes 30,000 tonnes

Note: Text in **bold** in Table 2 indicates a change to the proposal.

List of Replacement Figures – Figures 1, 2, 3, 4, and 5 are deleted and replaced with the following:

Figure 1 – Site location
Figure 2 – Ammonia plant and storage location

[Signed 29 June 2016]

Dr Tom Hatton
CHAIRMAN
Environmental Protection Authority
under delegated authority

Approval date: _____

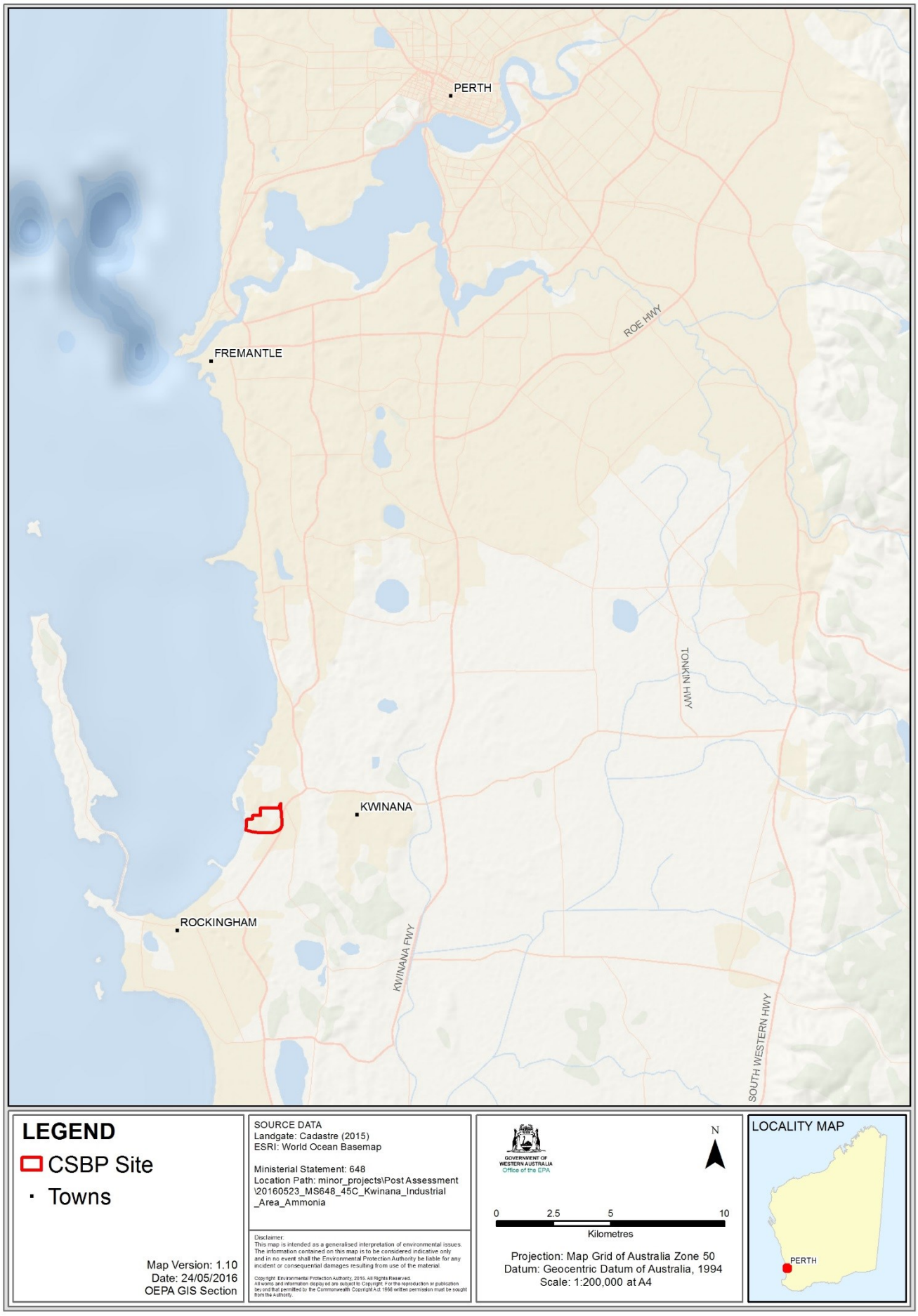


Figure 1 Site location

Figure 2 Ammonia plant and storage location