Statement No.

MINISTER FOR THE ENVIRONMENT; SCIENCE

000689

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

AMMONIUM NITRATE PRODUCTION FACILITY EXPANSION
KWINANA

Proposal: To increase the capacity of the CSBP Ammonium Nitrate Production Facility from approximately 235,000 tonnes per annum to approximately 580,000 tonnes per annum by debottlenecking and duplicating the existing facilities. The facility is within the CSBP Kwinana site in the Kwinana Industrial Area, Town of Kwinana, as documented in schedule 1 of this statement.

Proponent: CSBP Limited

Proponent Address: PO Box 345
KWINANA WA 6966

Assessment Number: 1537

Report of the Environmental Protection Authority: Bulletin 1182

The proposal referred to above may be implemented by the proponent subject to the following conditions and procedures:

1 Implementation

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

2 Proponent Commitments

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

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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 proposal 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 proposal.

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 proposal 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 proposal shall also be provided.

3-3 The nominated proponent shall notify the Department of Environment 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 proposal within five years of the date of this statement or the approval granted in this statement shall lapse and be void.

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

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

The application shall demonstrate that:

1. the environmental factors of the proposal 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 proposal.

5 Compliance Auditing and Performance Review

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

1. the status of implementation of the proposal 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 Environment is empowered to monitor 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 following the formal authority issued to the decision-making authorities under section 45(7) of the *Environmental Protection Act 1986*, 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 implementing the project; the environmental objectives for those issues; the methodologies used to achieve these; and the key indicators of environmental performance measured against those objectives;

2. the level of progress in the achievement of sound environmental performance, including industry benchmarking, and the use of best practicable measures available;

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

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 objectives over the next five years, including improvements in technology and management processes.

5-3 The proponent may submit a report prepared by an independent auditor to the Chief Executive Officer of the Department of Environment on each condition or commitment of this statement which requires the preparation of a management plan, programme, strategy or system, stating whether the requirements of each condition or commitment have been fulfilled within the timeframe stated within each condition or commitment.

6 Greenhouse Gas Abatement

6-1 Prior to commencement of construction, the proponent shall develop a Greenhouse Gas Abatement Program to:

- ensure that the plant is designed and operated in a manner which achieves reductions in "greenhouse gas" emissions as far as practicable;
- provide for ongoing "greenhouse gas" emissions reductions over time;
- ensure that through the use of best practice, the total net "greenhouse gas" emissions and/or "greenhouse gas" emissions per unit of product from the project are minimised; and

- manage "greenhouse gas" emissions in accordance with the *Framework Convention on Climate Change 1992*, and consistent with the National Greenhouse Strategy;

to the requirements of the Minister for the Environment on advice of the Environmental Protection Authority.

This Program shall include:

1. calculation of the "greenhouse gas" emissions associated with the proposal, as advised by the Environmental Protection Authority;

   Note: The current requirements of the Environmental Protection Authority are set out in: *Minimising Greenhouse Gas Emissions, Guidance for the Assessment of Environmental Factors, No. 12* published by the Environmental Protection Authority (October 2002). This document may be updated or replaced from time to time.

2. specific measures to minimise the total net "greenhouse gas" emissions and/or the "greenhouse gas" emissions per unit of product associated with the proposal using a combination of "no regrets" and "beyond no regrets" measures;

   Note: The following definitions apply:

   1. "no regrets" measures are those which can be implemented by a proponent and which are effectively cost-neutral.
   2. "beyond no regrets" measures are those which can be implemented by a proponent and which involve additional costs that are not expected to be recovered.

3. consideration of the implementation of "greenhouse gas" offset strategies;

4. estimation of the "greenhouse gas" efficiency of the project (per unit of product and/or other agreed performance indicators) and comparison with the efficiencies of other comparable projects producing a similar product, both within Australia and overseas;

5. implementation of thermal efficiency design and operating goals consistent with the Australian Greenhouse Office Technical Efficiency guidelines in design and operational management;

6. actions for the monitoring, regular auditing and annual reporting of "greenhouse gas" emissions and emission reduction strategies;

7. a target set by the proponent for the progressive reduction of total net "greenhouse gas" emissions and/or "greenhouse gas" emissions per unit of product and as a percentage of total emissions over time, and annual reporting of progress made in achieving this target. Consideration should be given to the use of renewable energy sources such as solar, wind or hydro power;

8. a program to achieve reduction in "greenhouse gas" emissions, consistent with the target referred to in (7) above;

9. entry, whether on a project-specific basis, company-wide arrangement or within an industrial grouping, as appropriate, into the Commonwealth Government's "Greenhouse Challenge" voluntary cooperative agreement program.

   Components of the agreement program include:

   1. an inventory of emissions;
   2. opportunities for abating "greenhouse gas" emissions in the organisation;
   3. a "greenhouse gas" mitigation action plan;
   4. regular monitoring and reporting of performance; and
   5. independent performance verification.

10. review of practices and available technology; and

11. "continuous improvement approach" so that advances in technology and potential operational improvements of plant performance are adopted.

6-2 The proponent shall implement the Greenhouse Gas Abatement Program required by condition 6-1.

6-3 Prior to commencement of construction, the proponent shall make the Greenhouse Gas Abatement Program required by condition 6-1 publicly available.

7 Nitrous Oxide (Greenhouse Gas Emissions) Improvement Plan

7-1 The proponent shall design and construct the new nitric acid plant with a larger boiler than is currently in the existing nitric acid plant to achieve a reduction of carbon dioxide equivalent emissions (from nitrous oxide) by approximately 68,000 tonnes per annum when compared with the existing nitric acid plant (for equivalent capacity).

7-2 At least three months prior to commissioning the new nitric acid plant, the proponent shall prepare and submit a Nitrous Oxide Emissions Improvement Plan, which takes into consideration world-wide commercial-scale trials and applications of new 'low nitrous oxide emission' catalysts for nitric acid plants and reviews the current state of trialling and application of low nitrous oxide emission catalysts, to the requirements of the Minister for the Environment on advice of the Environmental Protection Authority.

7-3 Every year until new technology is adopted for the plant, or until the Minister for the Environment advises that updating the Nitrous Oxide Emissions Improvement Plan required by condition 7-2 is no longer required, the proponent shall update this Plan to the requirements of the Minister for the Environment on advice of the Environmental Protection Authority.

7-4 The proponent shall make the Nitrous Oxide Emissions Improvement Plan required by condition 7-2 publicly available.

8 Prilling Tower

8-1 The proponent shall design and construct the new prilling plant to incorporate a scrubbing and emission control system to maintain the particulate emissions concentration at less than 50 milligrams per normalised cubic metre and the particulate emissions rate at less than 0.23 kilograms per tonne of product.

8-2 The proponent shall not operate the existing prilling tower for more than 15 months beyond the commencement of operation of the new prilling plant tower without the incorporation of scrubbing and emission control equipment which meets the requirements of the Minister for the Environment on advice of the Environmental Protection Authority.

9 Nitric Acid Plant

9-1 The proponent shall design and construct the new nitric acid plant such that oxides of nitrogen emissions from the exit stack do not exceed 100 milligrams per normalised cubic metre.

9-2 The proponent shall design and construct the new nitric acid plant to incorporate continuous monitoring of oxides of nitrogen emissions from the exit stack.

10 Wastewater Discharge

10-1 The proponent shall design and construct the new Ammonium Nitrate Production Facility such that the nitrogen load in the wastewater discharge from the site does not exceed the three-month rolling average to June 2004 (ie. 137 kilograms per day).

11 Noise

11-1 Prior to 31 December 2005, the proponent shall construct a noise barrier on the northern site boundary and/or implement other arrangements to ensure that noise levels at the BP boundary fence meet the assigned noise levels under the *Environmental Protection (Noise) Regulations 1997.*

12 Decommissioning Plans

12-1 Within six months following the date of publication of this statement, the proponent shall prepare a Preliminary Decommissioning Plan for the Ammonium Nitrate Production Facility, 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 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.

12-2 At least 12 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.

12-3 The proponent shall implement the Final Decommissioning Plan required by condition 12-2 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.

12-4 The proponent shall make the Final Decommissioning Plan required by condition 12-2 publicly available.

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 Environment 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.

3. Where a condition lists advisory bodies, it is expected that the proponent will obtain the advice of those listed as part of its compliance reporting to the Department of Environment.

Notes

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

2. The proponent is required to apply for a Works Approval and Licence for this project under the provisions of Part V of the *Environmental Protection Act 1986*.

3. In order to meet the requirements of the Department of Consumer and Employment Protection in terms of dangerous goods licensing, the proponent is required to prepare and submit to that Department a Safety Report in accordance with *the National Standard for the Control of Major Hazard Facilities*, National Occupational Health and Safety Commission: 1014 (2002).

Dr Judy Edwards MLA
MINISTER FOR THE ENVIRONMENT; SCIENCE

21 SEP 2005

Schedule 1

The Proposal (Assessment No. 1537)

The proposal is to increase the capacity of the Ammonium Nitrate Production Facility from approximately 235,000 tonnes per annum to approximately 580,000 tonnes per annum by debottlenecking and duplicating the existing facilities. The upgraded facilities will be located near the existing plant at the CSBP site within the Kwinana Industrial Area, as shown in Figures 1 and 2.

The expansion includes:

- Duplication and/or debottlenecking of the existing 500 tonnes per day (tpd) nitric acid plant;
- Duplication and/or debottlenecking of the existing 635 tpd ammonium nitrate reaction plant;
- Construction of a new 90% ammonium nitrate solution storage tank (250 m^3);
- Construction of a new replacement prilling plant; and
- A review of ammonium nitrate storage facilities.

The key characteristics of the proposal are described in Table 1 below.

Table 1: Summary and comparison of Key Proposal Characteristics

Characteristic	Existing Facility	Description of Expanded Facility
Location	Kwinana Beach Road – Kwinana – Kwinana Industrial Area (KIA).	Kwinana Beach Road – Kwinana – Kwinana Industrial Area (KIA) – no change
CSBP Site Area	138 hectares	138 hectares – ie. no change
Project Life	20-30 years	20-30 years
Plant Operating Hours	24 hour/day operation, 365 days per year except for maintenance shutdowns	24 hours per day operation, 365 days per year except for maintenance shutdowns – ie. no change
Plant Commissioning	1968 – prilling plant 1996 – existing nitric acid plant and ammonium nitrate plant	Second nitric acid plant 2007 Second ammonium nitrate plant 2007 New prilling plant 2007
Production Plants	• Nitric acid plant; • Nitric acid storage tanks • Ammonium nitrate plant; • Ammonium nitrate (90% solution) storage tank of 730 m^3 capacity; • Prilling plant; • Packaging and despatch facilities; and • 14,000 tonnes bulk and bag storage.	• 2 Nitric acid plants; • Nitric acid storage tanks; • 2 Ammonium nitrate plants; • New ammonium nitrate (90% solution) storage tank of 250 m^3 capacity; • Ammonium nitrate (70% solution) storage tank of 730m^3 capacity; • New enlarged prilling plant (existing prilling plant will eventually be decommissioned, but may need to be operated in parallel for several years and if so, appropriate pollution prevention will be fitted to existing plant; • Packaging and despatch facilities; and • 14,000 tonnes bulk and bag storage.

Characteristic	Existing Facility	Description of Expanded Facility
Production	• Nitric acid – average 187,000 tpa, maximum 200,000 tpa • Ammonium nitrate - average 235,000 tpa, maximum 254,000 tpa • Prilling plant – average 185,000 tpa, maximum 200,000 tpa	*Nitric Acid* • Debottleneck existing nitric acid – nominal 230,000 tpa; or • Duplicate existing nitric acid – double the current maximum to 400,000 tpa; or • Debottleneck existing and duplicate nitric acid facilities– 460,000 tpa nominal. *Ammonium nitrate* • Debottleneck existing ammonium nitrate – nominal 292,000 tpa; or • Duplicate existing ammonium nitrate – double the current maximum to 500,000 tpa; or • Debottleneck existing and duplicate ammonium nitrate facilities– 584,000 tpa nominal. *Prill* • New prilling plant – nominal 400,000 tpa (nominal 470,000 tpa if combined with existing plant).
Inputs	Ammonia, oxygen, and water	Ammonia, oxygen, and water
Outputs	Ammonium nitrate solution and prill plus air/water emissions (see below)	Ammonium nitrate solution and prill plus air/water emissions (see below)
Gaseous Emissions	Nitrogen oxides - 71 tpa Ammonium nitrate particulate – 104 tpa	Nitrogen oxides - 170 tpa Ammonia - 125 tpa Ammonium nitrate particulate: 79 tpa (proposed new plant at full rate) OR 103 tpa (proposed new plant at 50% rate, and existing plant retrofitted with scrubbing equipment and operating to a total output of 470,000 tpa).
Greenhouse Gas Emissions	667,394 tpa of net CO_2-e	1.5 million tpa of net CO_2-e
Liquid Effluent Discharges	Approx 1.5 ML/day of cooling tower blowdown water and stormwater to Cockburn Sound (to the SDOOL in February 2005 approx)	Approximately 2ML/day effluent to the Sepia Depression Ocean Outfall Landline (SDOOL) from the total CSBP site, including the proposed Ammonia Nitrate expansion facility Proposed nitrogen concentrations in effluent to Cockburn Sound/SDOOL will be less than or equal to that for June 2004 (3 monthly rolling average) i.e no net increase in site emissions of nitrogen from this proposal.
Noise	CSBP industrial complex does not currently meet the industry to industry assigned level of the *Environmental Protection (Noise) Regulations*	Will comply with the Environmental Protection (Noise) *Regulations 1997* or subsequent Ministerial Statements. CSBP will install a noise barrier at the northern boundary and/or other arrangements in 2005 to ensure this site achieves compliance with the *Environmental Protection (Noise) Regulations* at this location.
Net Power Generation	1 5MW	3 MW or equivalent steam production

Abbreviations:

1) m^3 : cubic metre
2) tpa : tonnes per annum
3) CO_2-e : carbon dioxide equivalent emissions
4) MW : megawatt

Figures (attached)

1. Regional location
2. Plant location

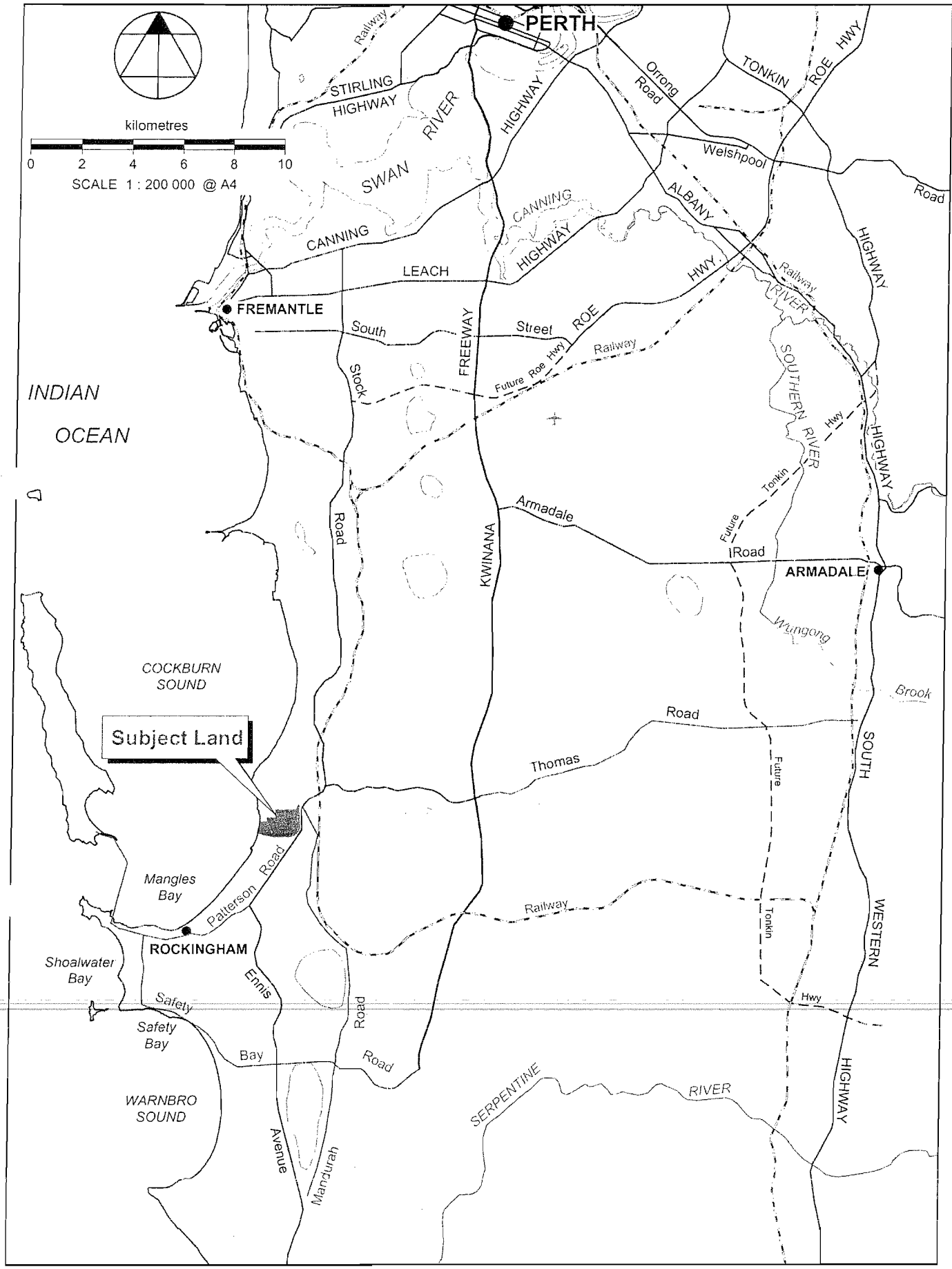

Figure 1: Regional Location

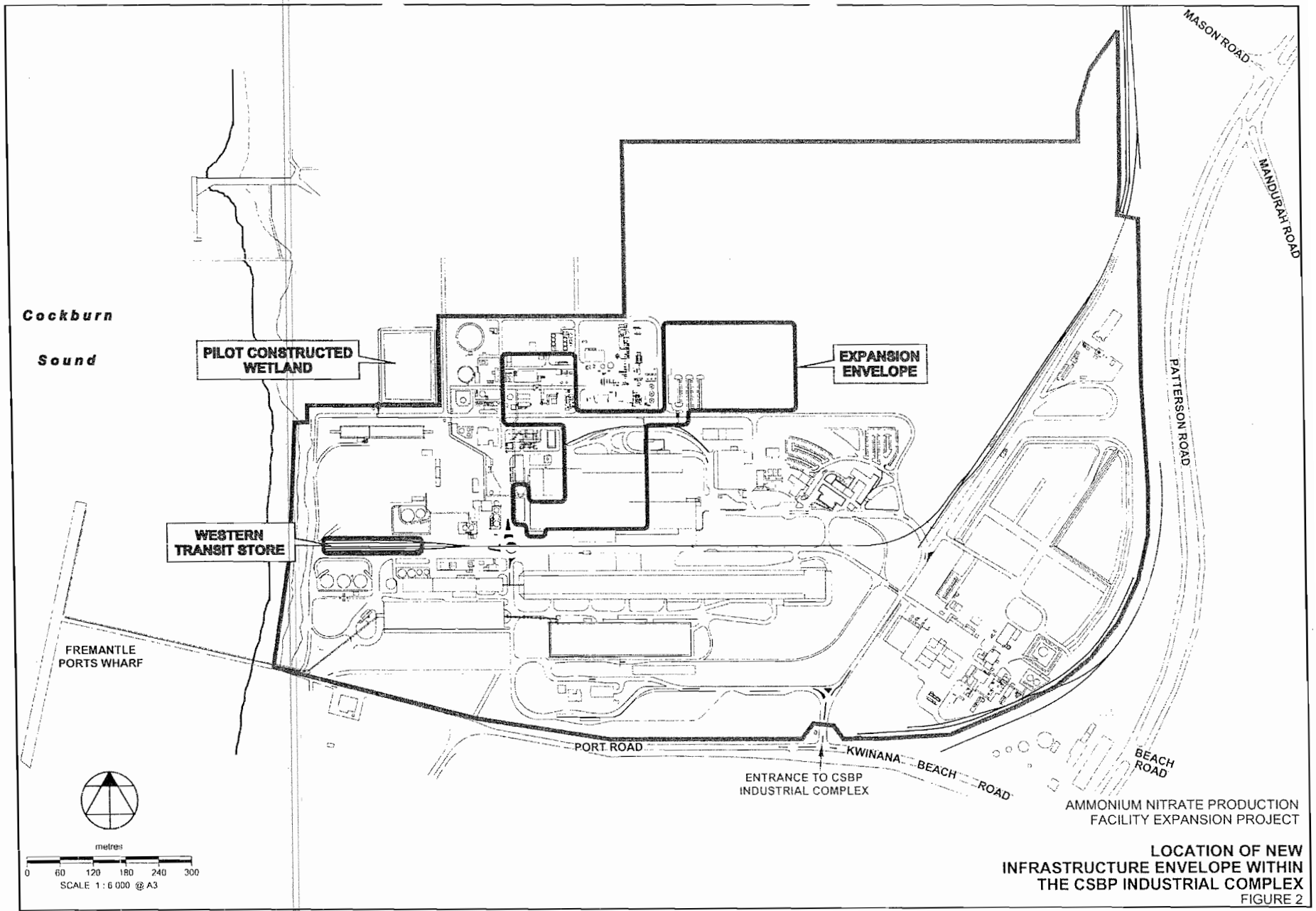

Figure 2: Plant location

Schedule 2

Proponent's Environmental Management Commitments

July 2005

AMMONIUM NITRATE PRODUCTION FACILITY EXPANSION KWINANA

(Assessment No. 1537)

CSBP LIMITED

Proponent's Environmental Management Commitments – July 2005

Ammonium Nitrate Production Facility Expansion (Assessment No. 1537)

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 number;
- a commitment topic;
- the 'action' to be undertaken by the proponent;
- the objective of the commitment;
- the timing requirements of the commitment; and
- the body/agency to provide technical advice to the Department of Environment.

NO.	TOPIC	ACTIONS	OBJECTIVE/S	TIMING	ADVICE
1	Construction	Develop a Construction Environmental Management Plan for the construction phase of the expansion. The issues addressed in the Construction Environmental Management Plan shall include but not be limited to: • construction noise; • construction dust; • construction waste; and transport of infrastructure.	To ensure all aspects of project construction are conducted such that environmental impacts are minimised as far as practicable, and that regulatory requirements are complied with.	Prior to construction.	
2	Construction	Implement the Construction Environmental Management Plan.	To ensure all aspects of project construction are conducted such that environmental impacts are minimised as far as practicable, and that regulatory requirements are complied with.	During to construction.	
3	Environmental Management	Update the CSBP Environmental Management System and related Procedures, which details procedures for the management and monitoring of the Ammonium Nitrate Production Facility.	To protect the environment in the event of an incident.	Prior to commissioning.	
4	Environmental Management	Implement the updated CSBP Environmental Management System and related Procedures.	To protect the environment in the event of an incident.	Prior to commissioning.	

NO.	TOPIC	ACTIONS	OBJECTIVE/S	TIMING	ADVICE
5	Greenhouse Gases	Retrofit a larger boiler to the existing nitric acid plant.	To reduce greenhouse gas emissions by approximately 68,000 tpa of CO_{2e}.	Within 3 years following commissioning of the new nitric acid plant.	
6	Greenhouse Gases	Retrofit nitrous oxide reduction technologies in the existing nitric acid plant if the technology proves commercially successful in the new plant, and after any Australian greenhouse gas emission laws and related carbon trading schemes are known.	To ensure that best practicable measures and technologies are used to minimise Western Australia's greenhouse gas emissions.		
7	Greenhouse Gases	Provide up to 80,000 tpa of CO_2 to Alcoa World Alumina Australia for injection into residue disposal areas to create carbonates to bind the CO_2 subject to the satisfactory contractual arrangement.	To ensure that best practicable measures and technologies are used to minimise Western Australia's greenhouse gas emissions.	Subject to the satisfactory contractual arrangement.	
8	Surface water Quality	Dispose of effluent to the Sepia Depression.	To manage the potential effects of the proposal on surface water quality.	By end of 2005.	
9	Surface water Quality	Review the performance of the pilot nitrogen stripping wetland, and determine whether to proceed with the planned 3 additional wetland cells. Pilot trial results to be made publicly available.	To manage the potential effects of the proposal on surface water quality.	February 2006.	
10	Surface water Quality	Continue, through KIC, to contribute to the State's ambient monitoring of Cockburn Sound waters.	To manage the potential effects of the proposal on surface water quality.	Ongoing.	
11	Noise Management	Design, construct and operate the plants to ensure that *Environmental Protection (Noise) Regulations 1997* noise limits are met at residential premises to the extent CSBP's operations contribute to the noise levels.	To ensure compliance with prescribed standards and minimise where practicable noise impacts.	At design and during operation.	
12	Noise Management	Monitor the plants for compliance with the industry to industry noise limits in the *Environmental Protection (Noise) Regulations 1997*, as they are currently planned to be amended.	To ensure compliance with prescribed standards and minimise where practicable noise impacts.	In the event the Regulations for this industry to industry noise level are not amended, CSBP will comply with the existing Regulations within 6 months of the Regulation review process ceasing.	
13	Noise Management	Install acoustic enclosures around the nitric acid intercoolers for the existing and new plant.	To ensure compliance with prescribed standards and minimise where practicable noise impacts.	Prior to commissioning the new plant.	
14	Water Resources	Source water for this project from either KWRP, or sustainable ground water supplies under licence.	To ensure use of scheme water is minimized.	At commissioning.	

NO.	TOPIC	ACTIONS	OBJECTIVE/S	TIMING	ADVICE
15	Water Resources	Water Corporation scheme water not to be used except in emergency or supply disruption situations.	To ensure use of scheme water is minimized.	At commissioning.	
16	Visual Amenity	Undertake the following management strategies where appropriate: • buildings will be coloured in accordance with CSBP's usual standards for industrial plant; • good housekeeping practices will be maintained at all times; and • lighting will comply with Australian Standard AS 4282.	To improve the visual amenity of the proposed expansion	At construction	

Abbreviations

DoE – Department of Environment
DoIR – Department of Industry and Resources
KIC – Kwinana Industries Council
KWRP – Kwinana Water Reclamation Plant
CO_{2e} – carbon dioxide equivalents