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Statement No.

MINISTER FOR THE ENVIRONMENT

000647

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

PROPOSED AMMONIA-UREA PLANT AT KWINANA
(Excluding Storage, Import and Export of Ammonia)

Proponent: CSBP Limited

Proponent Address: PO Box 345, Kwinana WA 6966

Assessment Number: 1469

Previous Assessment Number: 020

Previous Statement Number: Statement No. 034 published on 2 August 1988

Report of the Environmental Protection Authority: Bulletin 1094

Previous Report of the Environmental Protection Authority: Bulletin 309

The above proposal, with the exception of the storage, import and export of ammonia, is now subject to the following conditions and procedures which consolidate and replace all previous conditions and procedures relating to the manufacture of ammonia-urea (See note 3 at the foot of this statement):

1 Implementation

1-1 The proponent shall implement the proposal subject to the conditions of this statement.

2 Proponent Commitments

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

Published on

13 APR 2004

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 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 proposal within five years of the date of this statement or the approval granted in the statement published on 2 August 1988 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 modified 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 modified proposal.

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 proposal;

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, 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, 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;

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 Plant Site

6-1 The proponent shall construct the plant on the proponent's preferred site, as defined in the Environmental Review and Management Program.

7 Hazard and Risk Management Strategy

7-1 The proponent shall prepare in stages, with timing as indicated in brackets below, a Comprehensive and Integrated Hazard and Risk Management Strategy, to the requirements of the Minister for the Environment on advice of the Environmental Protection Authority.

Note: In the preparation of advice to the Minister, the Environmental Protection Authority expects that the advice of the following agencies will be obtained:

- Department of Industry and Resources;
- Fremantle Ports; and
- Local Government Authorities.

This strategy shall consist of the following:

1. A HAZOP review (before mechanical construction commences);

2. A hazard analysis update, including a fire safety plan; a plan detailing the management of the commissioning stage; and a plan of emergency procedures (before plant commissioning); and

3. An audit of risk and hazards (within two years following commencement of operations, and upon request thereafter).

7-2 The proponent shall implement the Comprehensive and Integrated Hazard and Risk Management Strategy required by condition 7-1 to the requirements of the Minister for the Environment on advice of the Environmental Protection Authority.

7-3 The proponent shall make the Comprehensive and Integrated Hazard and Risk Management Strategy required by condition 7-1 publicly available to the requirements of the Minister for the Environment on advice of the Environmental Protection Authority.

8 Plant Emergency

8-1 Prior to commissioning the plant, the proponent shall prepare a Plant Emergency Plan, to the requirements of the Minister for the Environment on advice of the Environmental Protection Authority.

This plan shall:

1. take into account all appropriate contingencies; and

2. conform to the requirements of the Kwinana Emergency Plan and the Port Safety Management Plan.

9 Nitrogen Reduction

9-1 Prior to commissioning the plant, the proponent shall prepare a Nitrogen Reduction Management Plan for the CSBP complex, to the requirements of the Minister for the Environment on advice of the Environmental Protection Authority.

This plan shall address:

1. plant design to achieve additional reductions in nitrogen load of 7 tonnes per year; and

2. monitoring of nitrogen discharged into Cockburn Sound from both the plant and the CSBP complex.

9-2 The proponent shall implement the Nitrogen Reduction Management Plan required by condition 9-1 to the requirements of the Minister for the Environment on advice of the Environmental Protection Authority.

9-3 The proponent shall make the Nitrogen Reduction Management Plan required by condition 9-1 publicly available to the requirements of the Minister for the Environment on advice of the Environmental Protection Authority.

10 Atmospheric Emissions

10-1 Prior to commissioning the plant, the proponent shall prepare an Atmospheric Emissions Management Plan for odours and fugitive emissions generated by the plant, to the requirements of the Minister for the Environment on advice of the Environmental Protection Authority.

This plan shall address the methods by which odours and fugitive emissions will be minimised or eliminated.

10-2 The proponent shall implement the Atmospheric Emissions Management Plan required by condition 10-1 to the requirements of the Minister for the Environment on advice of the Environmental Protection Authority.

10-3 The proponent shall make the Atmospheric Emissions Management Plan required by condition 10-1 publicly available to the requirements of the Minister for the Environment on advice of the Environmental Protection Authority.

11 Solid Waste

11-1 Prior to commissioning the plant, the proponent shall prepare a Solid Waste Management Plan for the site, to the requirements of the Minister for the Environment on advice of the Environmental Protection Authority.

11-2 The proponent shall implement the Solid Waste Management Plan required by condition 11-1 to the requirements of the Minister for the Environment on advice of the Environmental Protection Authority.

11-3 The proponent shall make the Solid Waste Management Plan required by condition 11-1 publicly available to the requirements of the Minister for the Environment on advice of the Environmental Protection Authority.

12 Cooling Water

12-1 Prior to the commencement of construction, the proponent shall refer the final cooling water proposal to the Environmental Protection Authority.

13 Wastewater

13-1 Prior to commissioning the plant, the proponent shall prepare a Wastewater Management Plan, to the requirements of the Minister for the Environment on advice of the Environmental Protection Authority.

This plan shall address:

1. a wastewater monitoring program to include the following parameters:
   - pH, nitrogen, total dissolved solids, and total suspended solids of the effluent;
   - temperature of the wastewater discharge, and of the surface waters of Cockburn Sound at an appropriate distance form the point of discharge;

1. reporting arrangements; and

2. modification of environmental management in response to monitoring reports.

13-2 The proponent shall implement the Wastewater Management Plan required by condition 13-1 to the requirements of the Minister for the Environment on advice of the Environmental Protection Authority.

13-3 The proponent shall make the Wastewater Management Plan required by condition 13-1 publicly available to the requirements of the Minister for the Environment on advice of the Environmental Protection Authority.

14 Decommissioning Plans

14-1 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.

14-2 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.

14-3 The proponent shall implement the Final Decommissioning Plan required by condition 14-2 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.

14-4 The proponent shall make the Final Decommissioning Plan required by condition 14-2 publicly available, to the requirements of the Minister for the Environment on advice of the Environmental Protection Authority.

15 Work Practices

15-1 Prior to commencement of construction, the proponent shall submit a written prescription for contractor work practices 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.

15-2 The proponent shall ensure that the prescription of work practices required by condition 15-1 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.

3 Government agencies will prepare and implement, by a date to be determined by the Minister for the Environment, an overall and integrated Kwinana Emergency Plan and an integrated Fremantle Port Safety Management Plan incorporating the Kwinana Industrial Area and its surrounds. The Port Safety Management Plan will be compatible with and integrated with the Kwinana Emergency Plan.

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 storage, import and export of ammonia are amended under Section 46 of the *Environmental Protection Act 1986* and included in a separate consolidated statement (Statement No. 624 published on 16 May 2003).

4 It is expected that the proponent will liaise with the Cockburn Sound Management Council during the preparation of environmental management plans, as appropriate.

Judy Edwards

Dr Judy Edwards MLA
MINISTER FOR THE ENVIRONMENT

13 APR 2004

Schedule 1

Proponent's Consolidated Environmental Management Commitments

Edited November 2003

PROPOSED AMMONIA-UREA PLANT AT KWINANA (Excluding Storage, Import and Export of Ammonia)

(Assessment No. 1469)

CSBP LIMITED

PROPOSED AMMONIA/UREA PLANT AT KWINANA
(Assessment No. 1469)

PROPONENT COMMITMENTS (Edited 25 November 2003)

1. OPERATIONAL PHILOSOPHY

- The incorporation of safety aspects into operations will commence with the selection of technologies and plant design that will minimise the risk of plant failure and human error. During the design phase, the proponent will undertake a Hazard and Operability (HAZOP) study in conjunction with the technology suppliers and engineering contractors to further enhance the plant's safety. In the procurement and construction phase, close attention will be paid to the quality control systems, both in vendors' equipment fabrication and in the plant construction.

- The philosophy for the automatic or manual shut-down procedure is developed based on maximum safety of the operators and equipment, and the minimum disturbance to the environment.

2. DESIGN

2.1 General

- The process licensors' design philosophy will be adhered to.

- Operational stability will be achieved by duplication of critical equipment, a high level of automation and intensive training of operators.

- A check will be made on the final design to verify consistency with assumptions made in the preliminary risk analysis.

- If any of the economic factors affecting the cooling split change during the design stage of the project, then the situation will be reassessed and, where possible, the proponent will attempt to increase the use of air cooling if it is economic to do so.

2.2 Standards

- Appropriate Australian and international standards will be used in the design of the facilities.

- In accordance with recommended practice, the plant will be designed to a higher standard for earthquakes than required for normal structures.

2.3 Layout

- The design and layout of the plant will provide protection against damage and avoid the placement of equipment in vulnerable positions where impacts from vehicles could occur. The layout will also take into account plant operability, maintenance and access for escape and rescue.

2.4 Aesthetics

- The plant site will be attractively landscaped, and buildings will be aesthetically designed and have neutral coloration for compatibility with the surrounding industrial setting.

2.5 Safety Features

- All employees will be trained in the safe work practices and emergency procedures appropriate to the operation of the plant and handling of all associated materials.

- The process will be designed to meet or improve on current emission standards and regulations.

- The plant will be highly instrumented and computer-controlled, and will be equipped with interlock systems which, upon initiation from carefully selected process or equipment performance criteria, will ensure a safe emergency shut-down of the plant.

- Gas monitoring systems and equipment condition monitors will be installed in the plants, as required.

2.6 Water Supply

- The water supply will be under licence from the Water and Rivers Commission, or water from the Water Corporation (recycled or scheme).

3. CONSTRUCTION

- Liaison with local authorities will be conducted to ensure that impacts associated with noise, dust and traffic are minimised.

- Construction activity will be restricted to normal construction industry working hours.

- Dust suppression watering practices will be implemented.

- All construction materials and practices will be in accordance with the relevant Australian and international codes.

4. OPERATIONS

4.1 General

- Ongoing control of dust will be implemented.

- The dosage of anti-foulant (Alfloc 7348 for example) to the cooling water system will be controlled.

- Procedures will be developed and written for the operation of the plant, including automatic or manual shut-down.

4.2 Maintenance

- Regular preventative maintenance programs will be implemented to minimise plant component failures.

- All maintenance tasks will require a written work permit, where all safety procedures will be specified, including their method of control and how the item maintained is to be tested before recommissioning.

- The routine checks on the plant and equipment, which will be carried out both continuously by the operators and periodically by the plant inspectors, will ensure that any unsafe or environmentally unacceptable leak or operating condition is detected and corrected. The plant management will be responsible for ensuring that all agreed routines are carried out and for making all personnel (including outside contractors working at site) aware of all the operational and personnel safety requirements on the site. Such requirements include familiarisation with and adherence to all operational, safety and work routines, as well as personal safety requirements.

5. PRODUCTS & RAW MATERIALS

5.1 Products

5.1.1 Urea

- During plant operation, urea dust will be managed by operating the urea granulation process (including the urea dust scrubber) at design specification, regular monitoring of the gaseous emission from the scrubber, and maintenance of good housekeeping in and around the plant.

- Transfer of urea from the plant to the storage building will be via an enclosed conveyor. From the storage building to the ship loader, a high capacity covered conveyor will be used, with provision in the design for a dust extraction system if needed.

5.1.2 Ammonia

- The use of valves and other fittings which contain copper, zinc or silver, or their alloys, will be avoided in all facilities handling ammonia.

5.2 Raw Materials

5.2.1 Natural Gas

- Safeguard systems will be designed to ensure that the natural gas fuel is shut off by a trip system in the event of a flame-out or other furnace or fired boiler failure events.

5.2.2 Methyldiethanolamine (MDEA)

- Gloves and eye protection will be worn during MDEA handling operations.

- Contact with aluminium, copper, zinc and magnesium alloys will be avoided in the MDEA handling area.

5.2.3 Nitrogen

- The plant will have a continuous supply of nitrogen (for process purging) from a nitrogen gas distribution system in the Kwinana region, as well as from a plant storage of liquid nitrogen equipped with separate evaporator capacity to ensure safe and quick handling of hazardous developments in the plant.

6. ENVIRONMENTAL ISSUES

6.1 Gaseous Wastes

- All gaseous waste products will be regularly monitored and disposed of in an environmentally safe manner and in accordance with statutory requirements to the satisfaction of the Environmental Protection Authority.

6.2 Odours

- The proponent confirms the commitment that adequate measures will be taken, both during the design stage and during the commissioning and operation stages of the plant development, to prevent odour generation from process vents, leaks and accidental gas releases.

6.3 Liquid Wastes

- All liquid waste products will be regularly monitored and disposed of in an environmentally safe manner and in accordance with statutory requirements to the satisfaction of the Department of Environmental Protection.

- Surface runoff from the process areas of the plant will be channelled into holding ponds and appropriately treated before disposal to Cockburn Sound, or the Cape Peron outfall pipeline when available.

- Acidic or alkaline effluents from the water treatment plant will be neutralised in a small holding pond before being pumped into the main holding pond.

- Spent oil changed from machinery will be sent off for reprocessing.

- Normal operating and maintenance procedures will require that any oil leaks be attended to immediately because of the possibility of damage to the equipment, fires and the hazard of slippery surfaces. Any spillages will be mopped up and cleaned up using standard techniques with dry absorbents and biodegradable solvents.

- There will be a separate sewerage system for any oily water which will allow any such water to be diverted to sumps for retention and skimming. Recovered oil will be removed by a truck and disposed of off-site and the clean water redirected to the main holding pond for neutralisation.

6.4 Solid Wastes

- Solid wastes will be managed in accordance with the Waste Management hierarchy, and relevant State regulations.

6.5 Noise

- Noise levels within the plant and at the plant boundaries will be in accordance with statutory requirements.

6.6 Monitoring

- Groundwater monitoring required by CSBP Limited's extraction licence and Environmental Protection Act licence will be carried out to the Water and River Commission's and Department of Environmental Protection's satisfaction.

6.7 Reporting

- The proponent will make the results of any monitoring available to the relevant authorities.

7. OCCUPATIONAL HEALTH

7.1 General

- Occupational health issues will be addressed in detail in the design stage of the project.

7.2 Medical Care

- On-site first aid facilities will be provided, together with support from CSBP Limited's Kwinana works facilities, which include the availability of an ambulance and an occupational health nurse during normal working hours.

- The proponent will liaise with all relevant local and State authorities in reviewing the design of medical and first aid procedures and facilities for the plant.

8. SAFETY

The plant will be operated under a Safety Report conforming to the National Standard and endorsed by the Department of Industry and Resources.

8.1 HAZOP Study

- The final design of the plant will be subject to a full HAZOP study before commissioning of the plant, as will any subsequent changes to design before implementation. This will ensure that the safety standards set for the plant are adhered to and will minimise the likelihood of plant failure.

- The HAZOP study will meet the Environmental Protection Authority's guidelines for HAZOP, as defined in Bulletin 278 (May 1987), and the National Standard for Major Hazard Facilities.

- The results of the HAZOP study will be made available to the relevant State agencies on request.

- Installation of new equipment and alterations to existing equipment will undergo a detailed check procedure on the design, including HAZOP analyses, prior to requisition.

8.2 Emergency Procedures

- The emergency response plan for the plant will provide effective understanding of credible accident scenarios within the plant and adjacent facilities and the necessary responses in terms of plant and personnel. In view of the short time available for response, planning and training for immediate recognition of emergencies and evacuation to safe areas for toxic releases is essential. The plan will be implemented before start-up and tested at regular intervals.

- A plan for public safety and awareness will be developed, including procedures for emergencies.

- Apart from the emergency procedures worked out for the specific operational requirements, prior to the commissioning of the plant, procedures will be developed to cover the requirements of the site, including:

- definition of emergencies (eg fire, gas leaks);
- organisation of emergency control teams;
- escape routes and assembly points for personnel;
- liaison requirements with local and State authorities, Western Power and the general public;
- warnings to fire brigades, hospitals and the police.

- The proponent will liaise with all relevant public authorities, including the local Counter-Disaster Advisory Committee, and nearby industrial operators in the development of emergency procedures. Copies of the procedures will be made available to all bodies affected.

8.3 Fire Protection

- A fire protection system will be incorporated in accordance with the requirements of the plant design and the Fire and Emergency Services Authority.

- The fire protection system will be supplied from a separate tank and pumping system fed from the production bores, with back-up from the scheme water main. Permanent hydrants will be situated at selected locations around the plant, together with foam generators in areas of the plant where ammonia leaks could occur.

- All plant personnel will be trained in the appropriate fire-fighting techniques.

- The fire-fighting capability of CSBP Limited Kwinana works, and the Kwinana Industries Mutual Aid Group, established by industrial operators in the Kwinana industrial area, will be available for emergency assistance.

8.4 Ship Loading Management Plan

- The proponent intends to develop a management plan for ship loading with the Fremantle Port Authority.
  The plan will include:
  - definition of emergencies (eg fire, gas leaks);
  - organisation of emergency control teams;
  - escape routes and assembly points for personnel;
  - liaison requirements with local and State authorities, the Environmental Protection Authority and the general public in the event of an emergency;
  - procedure for warning fire brigades and hospitals;
  - management of vehicle access to the wharf during loading;
  - provision of breathing apparatus to anyone entering the potential impact zone as defined by the eventual management plan.

8.5 Auditing

- Regular safety audits of the plant will be undertaken.

8.6 Security

- Security around the plant will be ensured by the installation of chain-link boundary fences, with access to the plant via a single gatehouse and emergency exits.

- Security patrols for the plant will be carried out.

8.7 Training

- All employees will be trained in the safe work practices and emergency procedures appropriate to the operation of the plant and handling of all associated materials.

- Plant operator training will be provided, based on the experience available to the proponent from existing ammonia/urea establishments. Some personnel will have practical training in these plants.

- Maintenance and inspection procedures (including work permits) will be developed to protect maintenance workers and to prevent unsafe situations from developing.

- Operation manuals will be developed which outline how various situations are to be handled by operators.