



MINISTER FOR THE ENVIRONMENT

Statement No.

000645

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

KEMERTON POWER STATION, KEMERTON

Proposal: The construction, operation and maintenance of a nominal 260 megawatt open cycle peaking power plant at Kemerton, as documented in schedule 1 of this statement.

Proponent: Transfield Services Kemerton Pty Limited (as trustee for Transfield Services Kemerton Trust)

Proponent Address: Level 12, Maritime Towers
201 Kent Street
Sydney NSW 2000

Assessment Number: 1499

Report of the Environmental Protection Authority: Bulletin 1121

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

1 Implementation and Changes

- 1-1 The proponent shall implement the proposal as documented in schedule 1 of this statement subject to the conditions of this statement.
- 1-2 Where the proponent seeks to change any aspect of the proposal as documented in schedule 1 of this statement in any way that the Minister for the Environment determines, on advice of the Environmental Protection Authority, is substantial, the proponent shall refer the matter to the Environmental Protection Authority.

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- 1-3 Where the proponent seeks to change any aspect of the proposal as documented in schedule 1 of this statement in any way that the Minister for the Environment determines, on advice of the Environmental Protection Authority, is not substantial, the proponent may implement those changes upon receipt of the approval of the Minister for the Environment.

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 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 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 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 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 the operations phase, 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.

- 5-3 The proponent may submit a report prepared by an auditor approved by the Department of Environmental Protection under the "Compliance Auditor Accreditation Scheme" to the Chief Executive Office of the Department of Environmental Protection on each condition/commitment of this statement which requires the preparation of a management plan, programme, strategy or system, stating that the requirements of each condition/commitment have been fulfilled within the timeframe stated within each condition/commitment.

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 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.

- 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.

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 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 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 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 Within this statement, to "have in place" means to "prepare, implement and maintain for the duration of the proposal".



Dr Judy Edwards MLA
MINISTER FOR THE ENVIRONMENT

- 9 FEB 2004

Schedule 1

The Proposal (Assessment No. 1499)

The proposal is to construct, operate and maintain a nominal 260 megawatt open cycle peaking power plant at Kemerton (location shown in Figures 1 and 2).

Table 1 – Key Proposal Characteristics

| Element | Description | | | | | | | | | | |
|---|---|-------------|-------------|-----------|-----------|------------------------|------------------------|-----------|------------|------------------------|------------------------|
| Project purpose | Provide peaking power to the South West Interconnected System | | | | | | | | | | |
| Project life | 25 years | | | | | | | | | | |
| Power generating capacity | Nominal 260MW | | | | | | | | | | |
| Energy generated per year | Approximately 240GWh | | | | | | | | | | |
| Thermal efficiency At 40°C, 40% relative humidity, and 101.3kPa ISO conditions 15°C, 60% relative humidity | <table border="1"> <thead> <tr> <th>Natural gas</th> <th>Liquid fuel</th> </tr> </thead> <tbody> <tr> <td>28.6% HHV</td> <td>29.3% HHV</td> </tr> <tr> <td>31.8% LHV³</td> <td>31.4% LHV³</td> </tr> <tr> <td>30.2% HHV</td> <td>30.9 % HHV</td> </tr> <tr> <td>33.5% LHV³</td> <td>33.0% LHV³</td> </tr> </tbody> </table> | Natural gas | Liquid fuel | 28.6% HHV | 29.3% HHV | 31.8% LHV ³ | 31.4% LHV ³ | 30.2% HHV | 30.9 % HHV | 33.5% LHV ³ | 33.0% LHV ³ |
| Natural gas | Liquid fuel | | | | | | | | | | |
| 28.6% HHV | 29.3% HHV | | | | | | | | | | |
| 31.8% LHV ³ | 31.4% LHV ³ | | | | | | | | | | |
| 30.2% HHV | 30.9 % HHV | | | | | | | | | | |
| 33.5% LHV ³ | 33.0% LHV ³ | | | | | | | | | | |
| Plant operating modes | Mode 1 - Peaking plant for 5% of the time at 100% load Mode 2 - Spinning reserve for 10% of the time at 55% load | | | | | | | | | | |
| Operating hours | Approximately 1000 hours per year | | | | | | | | | | |
| Estimated capacity factor | Approximately 10% | | | | | | | | | | |
| Facility footprint Site area including buffer | 2 hectares 28 hectares | | | | | | | | | | |
| Plant facilities | | | | | | | | | | | |
| Proposed technology Number and size of gas turbines Number of stacks Height of stacks Number of liquid fuel storage tanks | 2 x Siemens V94.2 gas turbine generators 2 x 130.5MW 2 35m 1 x 1.5ML tank | | | | | | | | | | |
| Construction period | Approximately 16 months | | | | | | | | | | |
| Inputs | | | | | | | | | | | |
| Cooling water | None | | | | | | | | | | |
| General water requirements | 20kL/day - For dust suppression during construction 30kL/yr - For domestic use | | | | | | | | | | |
| Natural gas | Approximately 3PJ per year (approximately 900 hours per year) taken from the Dampier to Bunbury Natural Gas Pipeline | | | | | | | | | | |

| | | |
|---|--|---|
| Liquid fuel (Backup) | Up to 6 ML per year ultra low sulphur diesel (less than 100 hours per year) Sulphur content of diesel – 50ppm maximum | |
| Outputs | | |
| Wastewater | None | |
| Solid waste | Less than 10 tpa | |
| Air emissions: | Natural gas (based on 900h per year at full load) | Liquid fuel (based on 100h per year at full load) |
| Oxides of nitrogen (NO _x) | <39.1 g/s (127 tpa) | <114.2 g/s (41.1 tpa) |
| Oxides of sulphur (SO _x) ¹ | 0.0 g/s (negligible tpa) | 4.06 g/s (1.146 tpa) |
| Oxides of sulphur (SO _x) ² | 0.0 g/s (negligible tpa) | 0.406 g/s (0.146 tpa) |
| Particulate matter | 2.0 g/s (6.48 tpa) | 7.62 g/s (2.74 tpa) |
| Carbon monoxide (CO) | 21.7 g/s (70.3 tpa) | 20.9 g/s (7.54tpa) |
| Polycyclic aromatic hydrocarbons (PAHs) | 0.00087 g/s (0.0028 tpa) | 0.016 g/s (0.0057 tpa) |
| Non-methane volatile organic compounds (NMVOCs) | 0.83 g/s (2.69 tpa) | 0.16 g/s (0.058 tpa) |
| Greenhouse gas emissions | Approximately 160,000 tpa CO _{2-e} (Assuming approximately 900 hours per year operation on natural gas and 100 hours per year operation on liquid fuel) | |
| Average greenhouse intensity | 667.6.1 kg CO _{2-e} /MWh (Assuming approximately 900 hours per year operation on natural gas and 100 hours per year operation on liquid fuel) | |
| Predicted noise level | <28 dB(A) at closest residences | |

¹ Emissions modelling based on use of normal distillate (500 ppm sulphur content)

² Emissions modelling based on use of ultra low sulphur diesel (50 ppm sulphur content)

³ Lower Heating Values (LHV) are manufacture guarantee values.

Abbreviations for Table 1

| | |
|-------------------|--------------------------------------|
| °C | degrees Celsius |
| CO _{2-e} | carbon dioxide equivalent |
| dB(A) | decibels (A weighted) |
| GWh | gigawatt hours |
| g/s | grams per second |
| HHV | higher heating value |
| ISO | International Standards Organisation |
| kg | kilograms |
| kL/day | kilolitres per day |
| kL/yr | kilolitres per year |
| kPa | kilopascals |
| LHV | lower heating value |
| m | metres |
| ML | megalitres |
| MW | megawatts |
| MWh | megawatt hours |
| ppm | parts per million |
| tpa | tonnes per annum |
| PJ | petajoules |
| < | less than |

Figures (attached)

Figure 1 – Regional location

Figure 2 – Location in Kemerton Industrial Park

Figure 3 – Proposed Kemerton Power Station site map

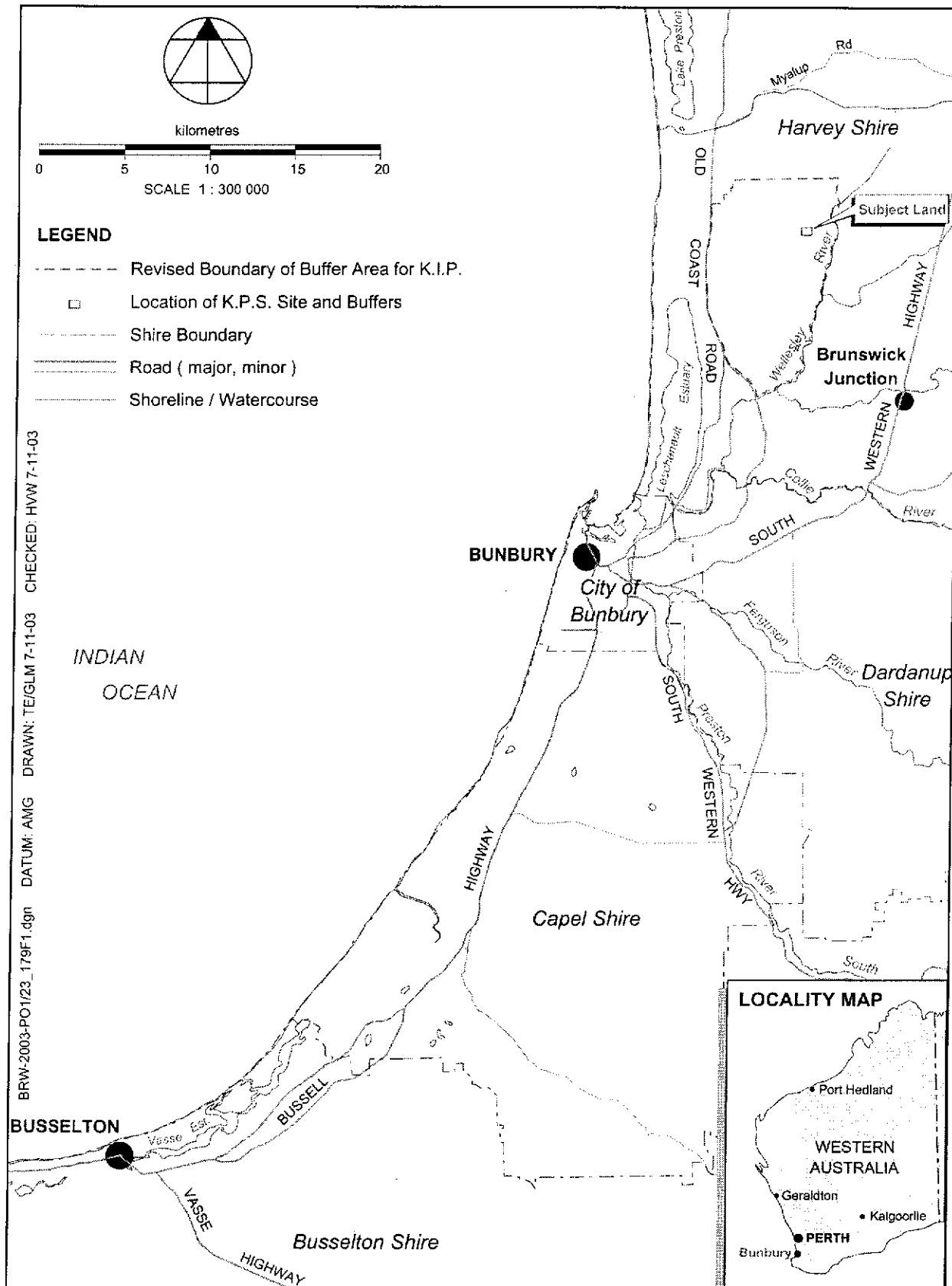
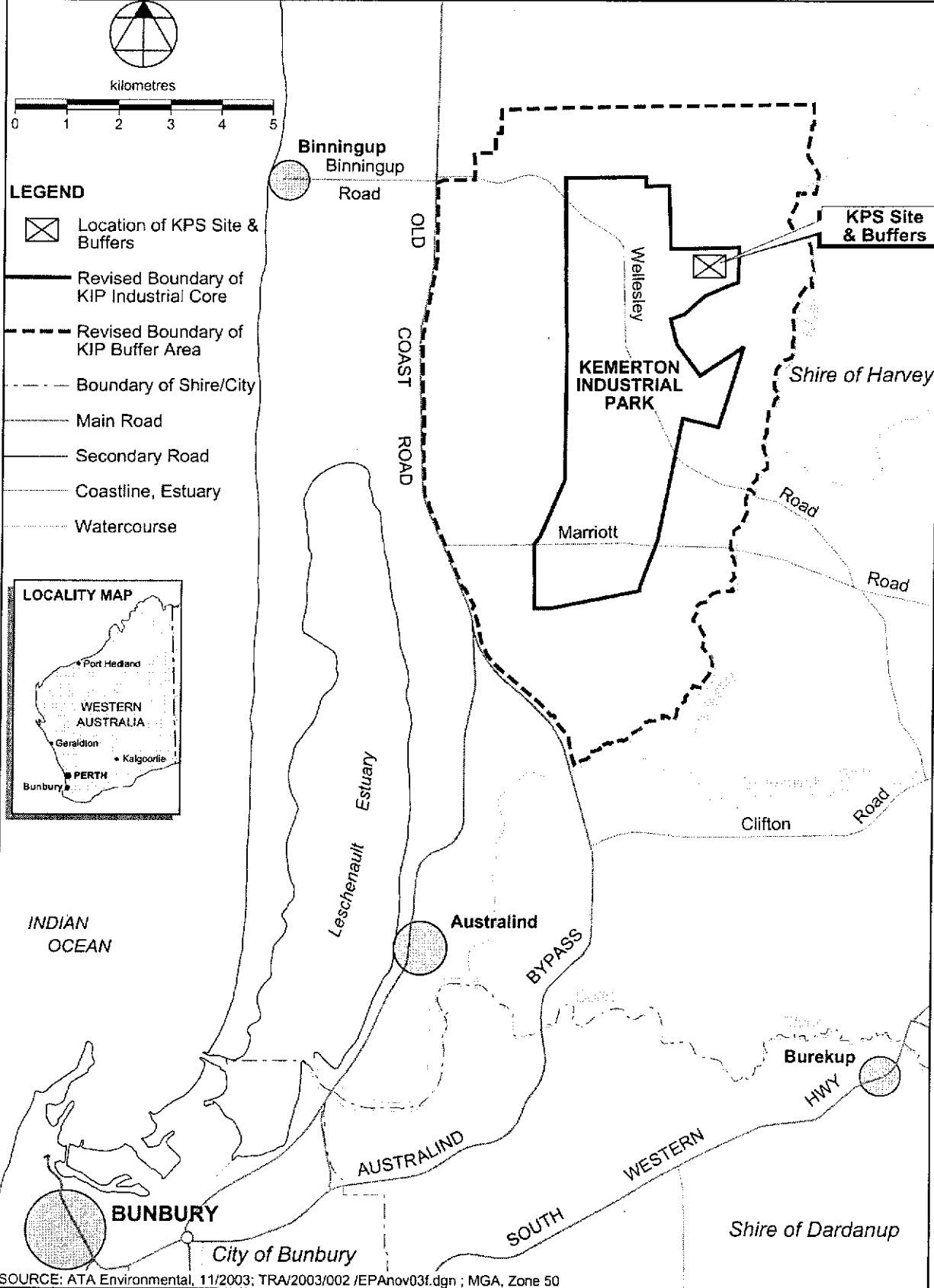


Figure 1: Regional location



SOURCE: ATA Environmental, 11/2003; TRA/2003/002 /EPAnov03f.dgn ; MGA, Zone 50

Figure 2: Location in Kemerton Industrial Park

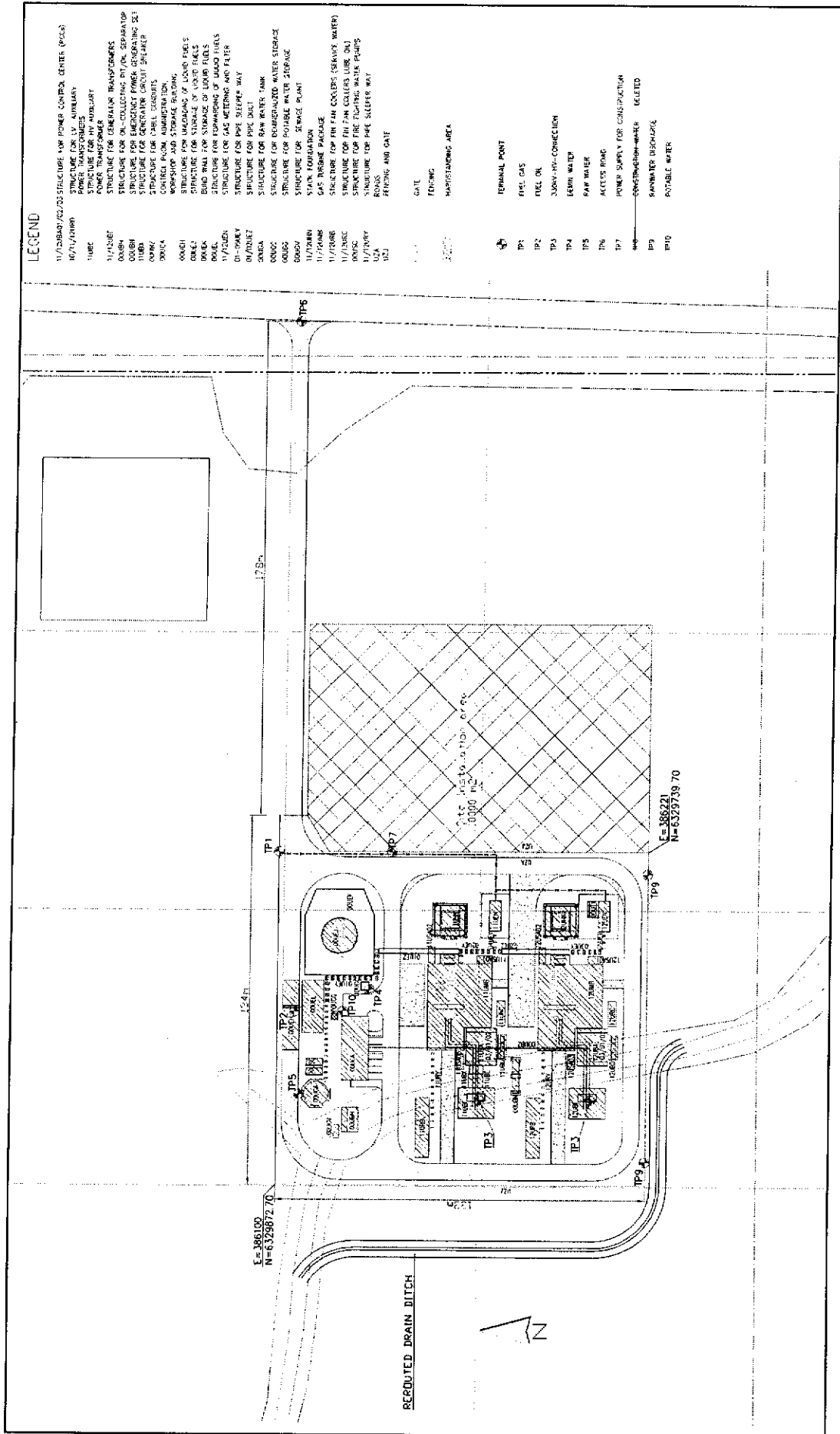


Figure 3: Proposed Kemerton Power Station site map

Schedule 2

Proponent's Environmental Management Commitments

December 2003

KEMERTON POWER STATION, KEMERTON

(Assessment No. 1499)

**TRANSFIELD SERVICES KEMERTON PTY LIMITED
(AS TRUSTEE FOR TRANSFIELD SERVICES KEMERTON TRUST)**

Proponent's Environmental Management Commitments – December 2003

KEMERTON POWER STATION (Assessment No. 1499)

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

| NO. | TOPIC | OBJECTIVE/S | ACTION | TIMING | ADVICE |
|-----|---------------------------------------|--|---|-----------------------|--------|
| 1 | Construction Environmental Management | 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. | <ol style="list-style-type: none"> 1. Prepare a Construction Environmental Management Program (CEMP) which will include the following plans: <ul style="list-style-type: none"> • Flora and Vegetation Management Plan (see commitment 3); • Fauna Management Plan (see commitment 5); • Groundwater Management Plan (see commitment 6); • Surface and Stormwater Water Management Plan (see commitment 8); • Air Emissions and Dust Management Plan (see commitment 10); • Noise Management Plan (see commitment 13); • Solid and Liquid Waste Management Plan (see commitment 15); • Hydrocarbon and Hazardous Material Handling Plan (see commitment 17); • Aboriginal Heritage Management Plan (see commitment 19); • Community Consultation Plan (see commitment 20); and • Dewatering Management Plan (see commitment 22); 2. Implement the approved Construction Environmental Management Program (CEMP) described in 1.1 above. | Prior to Construction | |

| NO. | TOPIC | OBJECTIVE/S | ACTION | TIMING | ADVICE |
|-----|--------------------------------------|---|--|------------------------|-------------|
| 2 | Operational Environmental Management | To ensure all aspects of project operation are conducted such that environmental impacts are minimised as far as practicable, and that regulatory requirements are complied with. | <ol style="list-style-type: none"> 1. Prepare an Operational Environmental Management Program (OEMP) which will include the following plans: <ul style="list-style-type: none"> • Flora and Vegetation Management Plan (see commitment 4); • Groundwater Management Plan (see commitment 7); • Surface and Stormwater Water Management Plan (see commitment 9); • Air Emissions Management Plan (see commitment 11); • Noise Management Plan (see commitment 14); • Solid and Liquid Waste Management Plan (see commitment 16); • Hydrocarbon and Hazardous Material Handling Plan (see commitment 18); • Community Consultation Management Plan (see commitment 21). 2. Implement the approved Operational Environmental Management Program (OEMP) described in 2.1 above. | Prior to Commissioning | |
| 3 | Terrestrial Flora and Vegetation | To maintain the abundance, species diversity, geographic distribution and productivity of vegetation communities during construction. | <ol style="list-style-type: none"> 1. Prepare a Construction Flora and Vegetation Management Plan which will address: <ul style="list-style-type: none"> • Construction Lay-down Site Rehabilitation; • Dieback Hygiene; • Weed management and control; • Clearing of blue gums; • Monitoring requirements; and • Reporting requirements. 2. Implement the approved Construction Flora and Vegetation Management Plan described in 3.1 above. | Prior to Construction | CALM FPC |

| NO. | TOPIC | OBJECTIVE/S | ACTION | TIMING | ADVICE |
|-----|---|---|---|------------------------|-------------|
| 4 | Terrestrial Flora and Vegetation | To maintain the abundance, species diversity, geographic distribution and productivity of vegetation communities during operation | <ol style="list-style-type: none"> 1. Prepare an Operational Flora and Vegetation Management Plan which will address: <ul style="list-style-type: none"> • Dieback Hygiene; • Weed management and control; • Clearing of blue gums in buffer; • Monitoring requirements; and • Reporting requirements. 2. Implement the approved Operational Flora and Vegetation Management Plan described in 4.1 above. | Prior to Commissioning | CALM FPC |
| 5 | Terrestrial Fauna Specially protected (Threatened) fauna. | To protect Specially Protected (Threatened) Fauna species and their habitats, consistent with the provisions of the <i>Wildlife Conservation Act 1950</i> during construction | <ol style="list-style-type: none"> 1. Prepare a Construction Fauna Management Plan which will address: <ul style="list-style-type: none"> • Feral and introduced animal management; • Management of species location if required; • Monitoring requirements; and • Reporting requirements. 2. Implement the approved Construction Fauna Management Plan described in 5.1 above. | Prior to Construction | CALM |
| 6 | Groundwater Quality | To monitor groundwater quality and identify and mitigate sources of contamination during construction | <ol style="list-style-type: none"> 1. Prepare a Construction Groundwater Management Plan which will address: <ul style="list-style-type: none"> • Sample bore locations; • Parameters and sample frequency for monitoring; • Mitigation and contingency measures; • Reporting requirements. 2. Implement the approved Construction Groundwater Management Plan described in 6.1 above. | Prior to Construction | WRC |

| NO. | TOPIC | OBJECTIVE/S | ACTION | TIMING | ADVICE |
|-----|-----------------------|--|--|------------------------|--------|
| 7 | Groundwater Quality | To monitor groundwater quality and identify and mitigate sources of contamination during operation | <ol style="list-style-type: none"> 1. Prepare an Operational Groundwater Management Plan which will address: <ul style="list-style-type: none"> • Zero process water discharge; • Design and bore construction; • Sample bore locations; • Parameters and sample frequency for monitoring; • Mitigation and contingency measures; • Reporting requirements. 2. Implement the approved Operational Groundwater Management Plan described in 7.1 above. | Prior to Commissioning | WRC |
| 8 | Surface Water Quality | To manage the potential effects of the construction of the project on surface water quality and to maintain existing flow paths where possible | <ol style="list-style-type: none"> 1. Prepare a Construction Surface and Storm Water Management Plan which will address: <ul style="list-style-type: none"> • Management of contaminated surface water runoff; • Monitoring requirements; • Mitigation and contingency measures; • Reporting requirements. 2. Implement the approved Construction Surface and Storm Water Management Plan described in 8.1 above. | Prior to Construction | WRC |
| 9 | Surface Water Quality | To manage the potential effects of the operation of the project on surface water quality and to maintain existing flow paths where possible | <ol style="list-style-type: none"> 1. Prepare an Operational Surface and Storm Water Management Plan which will address: <ul style="list-style-type: none"> • Management of contaminated storm waters such that none leaves the site; • Recovery mechanisms and structures for chemical and hydrocarbon spillages, • Monitoring requirements; • Response and contingency measures; and • Reporting requirements. 2. Implement the approved Operational Surface and Storm Water Management Plan described in 9.1 above. | Prior to Commissioning | WRC |

| NO. | TOPIC | OBJECTIVE/S | ACTION | TIMING | ADVICE |
|-----|---------------------------------|--|--|------------------------|--------|
| 10 | Air Quality - Gaseous Emissions | <p>To protect surrounding land users such that gaseous and particulate emissions will not adversely affect their welfare and amenity or cause health problems.</p> <p>To ensure that conditions which could promote the formation of photochemical smog are managed to minimise the generation of smog and any subsequent impacts.</p> | <p>1. Prepare a Construction Air Emissions/Dust Management Plan which will address:</p> <ul style="list-style-type: none"> • the use of water sprays to wet the site during windy conditions; • the use of speed limits to minimise dust generated by vehicle movements; • the use of minimum drop heights when loading and unloading soils and other excavated materials; minimisation of areas of disturbed and/or exposed soils; • Incident management; • Responsibilities; • Reporting requirements; and • Employee training and awareness. <p>2. Implement the approved Construction Air Emissions / Dust Management Plan described in 10.1 above.</p> | Prior to Construction | |
| 11 | Air Quality - Gaseous Emissions | <p>To ensure that best practicable measures are taken to minimise discharge of gaseous and particulate emissions to the atmosphere.</p> <p>To protect surrounding land users such that gaseous and particulate emissions will not adversely affect their welfare and amenity or cause health problems.</p> <p>To ensure that conditions which could promote the formation of photochemical</p> | <p>1. Prepare an Operational Air Emissions Management Plan which will address:</p> <ul style="list-style-type: none"> • Stack emission monitoring program (sampling location, frequency, parameters, standards and limits); • Reporting schedules; • Incident management; • Responsibilities; and • Employee training and awareness. <p>2. Implement the approved Operational Air Emissions Management Plan described in 11.1 above.</p> | Prior to Commissioning | |

| NO. | TOPIC | OBJECTIVE/S | ACTION | TIMING | ADVICE |
|-----|--------------------------|---|---|---|-------------------------------------|
| 12 | Greenhouse Gas Emissions | <p>To ensure that potential greenhouse gas emissions emitted from proposed projects are adequately addressed and best practicable measures and technologies are used in Western Australia to minimise Western Australia's greenhouse gas emissions.</p> | <p>Pursue greenhouse gas reduction through:</p> <ul style="list-style-type: none"> • Commitment to participate in the Greenhouse Challenge program. • Prepare a Greenhouse Gas Management Strategy under the Greenhouse Challenge program • Implement a Greenhouse Gas Management Strategy under the Greenhouse Challenge program • Operate and maintain the plant to "Good Electricity Practice" as defined in the National Electricity Code. | <p>Prior to Construction and throughout Operation</p> | <p>Australian Greenhouse Office</p> |
| 13 | Noise | <p>To protect the amenity of nearby residents from noise impacts resulting from construction activities associated with the proposal by ensuring that noise levels meet the <i>Environmental Protection (Noise) Regulations 1997</i>.</p> | <p>1. Prepare a Construction Noise Management Plan which will address:</p> <ul style="list-style-type: none"> • Noise management procedures for construction; • Retention of vegetation (plantation blue gums) where practicable to assist in noise mitigation; • Implementation of alternative noise attenuation packages to provide enhanced levels of noise control to meet boundary level noise limits if necessary; and • Implementation of a complaint management procedure to receive, investigate and action noise complaints. <p>2. Implement the approved Construction Noise Management Plan described in 13.1 above.</p> | <p>Prior to Construction</p> | |

| NO. | TOPIC | OBJECTIVE/S | ACTION | TIMING | ADVICE |
|-----|------------------|--|---|------------------------|-----------------|
| 14 | Noise | To protect the amenity of nearby residents from noise impacts resulting from operational activities associated with the proposal by ensuring that noise levels meet the <i>Environmental Protection (Noise) Regulations 1997</i> . | <ol style="list-style-type: none"> 1. Prepare an Operational Noise Management Plan which will address: <ul style="list-style-type: none"> • Maintenance of equipment that contributes to overall plant noise; • the use of silencers where necessary; • noise monitoring and reporting as necessary. • Implementation of a complaint management procedure to receive, investigate and action noise complaints. 2. Implement the approved Operational Noise Management Plan described in 14.1 above. | Prior to Commissioning | |
| 15 | Waste Management | Ensure that the generation of all wastes follows consideration of waste reduction in accordance with the waste hierarchy of reduction, reuse, recycling, treatment, and disposal during construction. | <ol style="list-style-type: none"> 1. Prepare a Construction Solid and Liquid Waste Management Plan to address the following: <ul style="list-style-type: none"> • Compliance with the requirements of the DEP and Regulations in relation to the management, handling and storage of wastes including application of the waste hierarchy of reduction, reuse, recycling, treatment, and disposal; • Implementation of waste reduction and recycling initiatives where recyclable wastes will be removed by an approved contractor; • General refuse and putrescible (domestic and industrial) solid waste and inert materials (not suitable for recycling) will be disposed of at the nearby Kemerton landfill in accordance with the Department of Health and Landfill Board requirements • Solvents and hazardous liquids will be collected and removed from the site for recycling or disposal in an approved liquids disposal area. • Prohibition of burning of waste onsite at all times. • Education of employees in non-hazardous solid waste management. | Prior to Construction | Shire of Harvey |

| NO. | TOPIC | OBJECTIVE/S | ACTION | TIMING | ADVICE |
|-----|------------------|--|--|------------------------|-----------------|
| | | | <ul style="list-style-type: none"> • Preparation of annual waste reports <p>2. Implement the approved Construction Solid and Liquid Waste Management Plan described in 15.1 above.</p> | | |
| 16 | Waste Management | Ensure that the generation of all wastes follows consideration of waste reduction in accordance with the waste hierarchy of reduction, reuse, recycling, treatment, and disposal during operation. | <p>1. Prepare an Operational Solid and Liquid Waste Management Plan to address the following:</p> <ul style="list-style-type: none"> • Compliance with the requirements of the DEP and Regulations in relation to the management, handling and storage of wastes including application of the waste hierarchy of reduction, reuse, recycling, treatment, and disposal ; • Implementation of waste reduction and recycling initiatives where recyclable wastes will be removed by an approved contractor; • General refuse and putrescible (domestic and industrial) solid waste and inert materials (not suitable for recycling) will be disposed of at the nearby Kemerton landfill in accordance with the Department of Health and Landfill Board requirements; • Solvents and hazardous liquids will be collected and removed from the site for recycling or disposal in an approved liquids disposal area; • Prohibition of burning of waste onsite at all times. • Education of employees in non-hazardous solid waste management; and • Preparation of annual waste reports. <p>2. Implement the approved Operational Solid and Liquid Waste Management Plan described in 16.1 above.</p> | Prior to Commissioning | Shire of Harvey |

| NO. | TOPIC | OBJECTIVE/S | ACTION | TIMING | ADVICE |
|-----|-------------------------------------|---|--|------------------------|--------|
| 17 | Hydrocarbon and Hazardous Materials | Design and construct (including bunding) in accordance with Australian Standards AS 1940 (Standards Australia 1993) and requirements of the DoIR and the <i>Explosives and Dangerous Goods Act 1961</i> . | <p>1. Prepare a Construction Hydrocarbon and Hazardous Materials Handling Plan to address:</p> <ul style="list-style-type: none"> • Tracking of the volume of hydrocarbon and hazardous waste materials produced; • Identification of disposal options. • Appropriate transport, storage and handling procedures; • Appropriate clean-up and emergency procedures for spillages; • Monitoring requirements; • Contingency and Response Measures; • Reporting requirements. <p>2. Implement the approved Construction Hydrocarbon and Hazardous Materials Handling Plan described above in 17.1.</p> | Prior to Construction | DoIR |
| 18 | Hydrocarbon and Hazardous Materials | Operate in accordance with Australian Standards AS 1940 (Standards Australia 1993) and requirements of the DoIR and the <i>Explosives and Dangerous Goods Act 1961</i> . | <p>1. Prepare an Operational Hydrocarbon and Hazardous Materials Handling Plan to address:</p> <ul style="list-style-type: none"> • Tracking of the volume of hydrocarbon and hazardous waste materials produced; • Identification of disposal options. • Appropriate transport, storage and handling procedures; • Appropriate clean-up and emergency procedures for spillages; • Monitoring requirements; • Contingency and Response Measures; • Reporting requirements. <p>2. Implement the approved Operational Hydrocarbon and Hazardous Materials Handling Plan described above in 18.1.</p> | Prior to Commissioning | DoIR |

| NO. | TOPIC | OBJECTIVE/S | ACTION | TIMING | ADVICE |
|-----|----------------------------|--|---|------------------------|------------------------------|
| 19 | Heritage | To protect any sites of significance uncovered during the construction phase of the project. | <p>1. Prepare a Construction Aboriginal Heritage Management Plan to address:</p> <ul style="list-style-type: none"> • Procedures to ensure compliance with the <i>Aboriginal Heritage Act 1972</i>; • Consideration of recommendations of the Archaeological and Ethnographic Site Identification Survey Report (AIC, 2003) and adopt appropriate measures to address these recommendations where practicable. • Procedures for protection of a site of significance uncovered during construction; and • Procedure for continued liaison with relevant parties during construction. <p>2. Implement the approved Construction Aboriginal Heritage Management Plan described above in 19.1.</p> | Prior to Construction | DIA |
| 20 | Social and Economic Issues | <p>Ensure that any potential impacts from the development on the nearby community are minimised.</p> <p>Ensure that recreational use of the areas surrounding the Kemerton Industrial Park is not compromised.</p> | <p>1. Prepare a Construction Community Consultation Plan to address:</p> <ul style="list-style-type: none"> • General community consultation associated with the environmental approval process; • Targeted consultation with nearby landowners and communities. • Consultation with the Shires of Harvey, (and/or Dardanup and City of Bunbury) and Kemerton Community Committee; • Local waterbody users' representative groups; • Opportunities to engage local workforces. <p>2. Implement the approved Construction Community Consultation Plan described above in 20.1.</p> | Prior to Commissioning | Kemerton Community Committee |

| NO. | TOPIC | OBJECTIVE/S | ACTION | TIMING | ADVICE |
|-----|----------------------------|---|---|------------------------|------------------------------|
| 21 | Social and Economic Issues | <p>Ensure that any potential impacts from the development on the nearby community are minimised.</p> <p>Ensure that recreational use of the areas surrounding the Kemerton Industrial Park is not compromised.</p> | <p>1. Prepare an Operational Community Consultation Plan to address:</p> <ul style="list-style-type: none"> • General community consultation associated with the environmental approval process; • Targeted consultation with nearby landowners and communities; • Consultation with the Shires of Harvey, (and/or Dardanup and City of Bunbury) and Kemerton Community Committee; • Local waterbody users' representative groups; • Opportunities to engage local workforces. <p>2. Implement the approved Operational Community Consultation Plan described above in 21.1.</p> | Prior to Commissioning | Kemerton Community Committee |
| 22 | Groundwater | To ensure the discharge water from de-watering activities during the construction phase will have no adverse impacts on the groundwater table, and /or the water quality or flow regime of surface water bodies (including wetlands). | <p>1. Prepare a Construction Dewatering Management Plan to address:</p> <ul style="list-style-type: none"> • Definition of the commencement date, duration, anticipated quantity and frequency of discharge; • Monitoring requirements; and • Reporting requirements. <p>2. Implement the approved Construction Dewatering Management Plan described above in 22.1.</p> | Prior to Construction | WRC |

Abbreviations

- CALM Department of Conservation & Land Management
- DEP Department of Environmental Protection
- DIA Department of Indigenous Affairs
- DoIR Department of Industry and Resources
- EPA Environmental Protection Authority
- FPC Forest Products Commission
- WRC Water and Rivers Commission

Attachment 1– Change to Proposal (Statement 645).

PROPOSAL: KEMERTON POWER STATION.

PROPONENT: ROC OIL (WA) PTY. LTD.

CHANGE: IN SCHEDULE 1, TABLE 1: KEY PROPOSAL CHARACTERISTICS
(ASSESSMENT NO. 1499).

FROM:

| ELEMENT | QUANTITIES/DESCRIPTION |
|----------------------|---|
| LIQUID FUEL (BACKUP) | Up to 6 ML per year ultra low sulphur diesel (less than 100 hours per year). Sulphur content of diesel – 50ppm maximum |

TO:

| ELEMENT | QUANTITIES/DESCRIPTION |
|----------------------|--|
| LIQUID FUEL (BACKUP) | <ul style="list-style-type: none">Up to 300 hours ultra low sulphur diesel for the 2005/2006 financial year period (1 July 2005 – 30 June 2006).Up to 6 ML per year ultra low sulphur diesel (less than 100 hours per year) from 1 July 2006. Sulphur content of diesel – 50ppm maximum |

DATE OF APPROVAL: 10/10/05

Attachment 2 - Change to Proposal (Statement 645).

PROPOSAL: KEMERTON POWER STATION.

PROPONENT: TRANSFIELD SERVICES KEMERTON PTY LIMITED (AS TRUSTEE FOR TRANSFIELD SERVICES KEMERTON TRUST).

CHANGE: IN SCHEDULE 1, TABLE 1: KEY PROPOSAL CHARACTERISTICS (ASSESSMENT NO. 1499).

FROM:

| ELEMENT | QUANTITIES/DESCRIPTION |
|----------------------|---|
| LIQUID FUEL (BACKUP) | Up to 6 ML per year ultra low sulphur diesel (less than 100 hours per year). Sulphur content of diesel – 50ppm maximum |

TO:

| ELEMENT | QUANTITIES/DESCRIPTION |
|----------------------|--|
| LIQUID FUEL (BACKUP) | <ul style="list-style-type: none">Up to 300 hours ultra low sulphur diesel for the 2006/2007 financial year period (1 July 2006 – 30 June 2007).Up to 6 ML per year ultra low sulphur diesel (less than 100 hours per year) from 1 July 2007. Sulphur content of diesel – 50ppm maximum |

DATE OF APPROVAL: 20/04/06

Change to Proposal (Ministerial Statement 645)

PROPOSAL: KEMERTON POWER STATION.

PROPOSER: TRANSFIELD SERVICES KEMERTON PTY LIMITED (AS TRUSTEE FOR TRANSFIELD SERVICES KEMERTON TRUST).

CHANGE: IN SCHEDULE 1, TABLE 1: KEY PROPOSAL CHARACTERISTICS (ASSESSMENT NO. 1499).

FEATURES OF CURRENT PROPOSAL:

| Element | Quantities/Description |
|------------------------|--|
| LIQUID FUEL - (BACKUP) | <ul style="list-style-type: none"> • Up to 300 hours ultra low sulphur diesel for the 2006/2007 financial year period (1 July 2006 – 30 June 2007). • Up to 6 ML per year ultra low sulphur diesel (less than 100 hours per year) from 1 July 2007. <p>Sulphur content of diesel - 50 ppm maximum.</p> |

FEATURES OF MODIFIED PROPOSAL:

| Element | Quantities/Description |
|------------------------|---|
| LIQUID FUEL - (BACKUP) | <ul style="list-style-type: none"> • Up to 600 hours ultra low sulphur diesel for the 2006/2007 financial year period (1 July 2006 – 30 June 2007). • Up to 6 ML per year ultra low sulphur diesel (less than 100 hours per year) from 1 July 2007. <p>Maximum sulphur content of diesel:</p> <ul style="list-style-type: none"> • 50 ppm (parts per million). |

DATE OF APPROVAL: 19 December, 2006

Attachment 4 to Statement 645

Change to Proposal

Proposal: Kemerton Power Station

Proponent: Transfield Services Kemerton Pty Ltd

Change: Increase in time of operation of the power station on liquid fuel (ultra low sulphur diesel) from 100 hours/year to 600 hours/year for the 2007 - 2008 financial year only.

Components of original Proposal as implemented:

| Component | Quantities/Description |
|------------------------------|---|
| Liquid fuel | Less than 100 hours/year operation on ultra low sulphur diesel (sulphur content 50 ppm maximum) and consumption of up to 6 ML/yr of diesel. |
| Greenhouse gas emissions | Approximately 167,000 tonnes of CO ₂ -e per year (Assuming 900 hours/year operation on natural gas and 100 hours/year operation on liquid fuel). |
| Average greenhouse intensity | 667.71 kg of CO ₂ -e / MWh (Assuming 900 hours/year operation on natural gas and 100 hours/year operation on liquid fuel). |

Components of changed Proposal:

| Component | Quantities/Description |
|------------------------------|---|
| Liquid fuel | Up to 600 hours/year operation on ultra low sulphur diesel (sulphur content 50 ppm maximum) and consumption of up to 36 ML/yr of diesel for the 2007 - 2008 financial year only. |
| Greenhouse gas emissions | Up to approximately 186,000 tonnes of CO ₂ -e per year (Assuming 400 hours/year operation on natural gas and up to 600 hours/year operation on liquid fuel for the 2007 - 2008 financial year only). |
| Average greenhouse intensity | Up to 752 kg of CO ₂ -e / MWh (Assuming 400 hours/year operation on natural gas and up to 600 hours/year operation on liquid fuel for the 2007 - 2008 financial year only). |

**Approved under delegation
from Minister for the Environment:**

Approval Date: 6.12.07

Attachment 5 to Statement 645
Change to Proposal

Proposal: Kemerton Power Station

Proponent: Transfield Services Kemerton Pty Ltd

Change: Increase in time of operation of the power station on liquid fuel (ultra low sulphur diesel) from 100 hours/year to 600 hours/year for the 2008-2009 financial year only. Note: the maximum allowable annual operating time for the power station (i.e. natural gas and liquid fuel operating hours combined) remains unchanged at 1000 hours/year.

Components of original Proposal as implemented:

| Component | Quantities/Description | |
|---|---|--|
| Liquid fuel (Backup) | Up to 6 ML per year ultra low sulphur diesel (less than 100 hours per year) sulphur content of diesel - 50 ppm maximum. | |
| Air emissions: | Natural gas (based on 900 h per year at full load) | Liquid fuel (based on 100 h per year at full load) |
| Oxides of nitrogen (NO _x) | < 39.1 g/s (127 tpa) | < 114.2 g/s (41.1 tpa) |
| Oxides of sulphur (SO _x) ¹ | 0.0 g/s (negligible tpa) | 4.06 g/s (1.146 tpa) |
| Oxides of sulphur (SO _x) ² | 0.0 g/s (negligible tpa) | 0.406 g/s (0.146 tpa) |
| Particulate matter | 2.0 g/s (6.48 tpa) | 7.62 g/s (2.74 tpa) |
| Carbon monoxide (CO) | 21.7 g/s (70.3 tpa) | 20.9 g/s (7.54 tpa) |
| Polycyclic aromatic hydrocarbons (PAHs) | 0.00087 g/s (0.0028 tpa) | 0.016 g/s (0.0057 tpa) |
| Non-methane volatile organic compounds (NMVOCs) | 0.83 g/s (2.69 tpa) | 0.16 g/s (0.058 tpa) |
| Greenhouse gas emissions | Approximately 160,000 tpa CO _{2-e} (Assuming approximately 900 hours per year operation on natural gas and 100 hours per year on liquid fuel). | |
| Average greenhouse intensity | 667.61 kg CO _{2-e} /MWh (Assuming approximately 900 hours per year operation on natural gas and 100 hours per year on liquid fuel). | |

¹ Emissions modelling based on use of normal distillate (500 ppm sulphur content)

² Emissions modelling based on use of ultra low sulphur diesel (50 ppm sulphur content)

Components of changed Proposal:

| Component | Quantities/Description | |
|---|---|--|
| Liquid fuel (Backup) | Up to 36 ML per year ultra low sulphur diesel (less than 600 hours per year) sulphur content of diesel - 50 ppm maximum. | |
| Air emissions: | Natural gas (based on 400 h per year at full load) | Liquid fuel (based on 600 h per year at full load) |
| Oxides of nitrogen (NO _x) | < 39.1 g/s (56.44 tpa) | < 114.2 g/s (246.6 tpa) |
| Oxides of sulphur (SO _x) ¹ | 0.0 g/s (negligible tpa) | 4.06 g/s (6.876 tpa) |
| Oxides of sulphur (SO _x) ² | 0.0 g/s (negligible tpa) | 0.406 g/s (0.876 tpa) |
| Particulate matter | 2.0 g/s (2.88 tpa) | 7.62 g/s (16.44 tpa) |
| Carbon monoxide (CO) | 21.7 g/s (31.24 tpa) | 20.9 g/s (45.24 tpa) |
| Polycyclic aromatic hydrocarbons (PAHs) | 0.00087 g/s (0.0012 tpa) | 0.016 g/s (0.0342 tpa) |
| Non-methane volatile organic compounds (NMVOCs) | 0.83 g/s (1.195 tpa) | 0.16 g/s (0.348 tpa) |
| Greenhouse gas emissions | Approximately 186,000 tpa CO _{2-e} (Assuming approximately 400 hours per year operation on natural gas and 600 hours per year on liquid fuel). | |
| Average greenhouse intensity | 752 kg CO _{2-e} /MWh (Assuming approximately 400 hours per year operation on natural gas and 600 hours per year on liquid fuel). | |

¹ Emissions modelling based on use of normal distillate (500 ppm sulphur content)

² Emissions modelling based on use of ultra low sulphur diesel (50 ppm sulphur content)

**Approved under delegation
from Minister for the Environment:**

Delegation under section 18 of
the Environmental Protection Act
Dated 24 November 2004

S45C Approval Date: 5.9.08

Attachment 6 to Statement 645 Change to Proposal

Proposal: Kemerton Power Station

Proponent: Transfield Services Kemerton Pty Ltd

Change: Increase in time of operation of the power station from 1,000 hours/yr [900 hours/yr on natural gas and 100 hours/yr on liquid fuel (ultra low sulphur diesel)] to 2,000 hours/yr [1,800 hours/yr on natural gas and 200 hours/yr on liquid fuel].

Components of original Proposal as implemented:

| Element | Quantities/Description | |
|---|---|--|
| Energy generated per year | Approximately 240 GWh | |
| Plant operating modes | Mode 1 - Peaking plant for 5% of the time at 100% load. Mode 2 - Spinning reserve for 10% of the time at 55% load. | |
| Operating hours | Approximately 1,000 hours per year. | |
| Capacity factor | Approximately 10%. | |
| Natural gas | Approximately 3 PJ per year (approximately 900 hours per year) taken from the Dampier to Bunbury Natural Gas Pipeline. | |
| Liquid fuel (Backup) | Up to 6 ML per year ultra low sulphur diesel (less than 100 hours per year). Sulphur content of diesel - 50 ppm maximum. | |
| Air emissions: | Natural gas (based on 900 h per year at full load) | Liquid fuel (based on 100 h per year at full load) |
| Oxides of nitrogen (NO _x) | < 39.1 g/s (127 tpa) | < 114.2 g/s (41.1 tpa) |
| Oxides of sulphur (SO _x) ¹ | 0.0 g/s (negligible tpa) | 4.06 g/s (1.146 tpa) |
| Oxides of sulphur (SO _x) ² | 0.0 g/s (negligible tpa) | 0.406 g/s (0.146 tpa) |
| Particulate matter | 2.0 g/s (6.48 tpa) | 7.62 g/s (2.74 tpa) |
| Carbon monoxide (CO) | 21.7 g/s (70.3 tpa) | 20.9 g/s (7.54 tpa) |
| Polycyclic aromatic hydrocarbons (PAHs) | 0.00087 g/s (0.0028 tpa) | 0.016 g/s (0.0057 tpa) |
| Non-methane volatile organic compounds (NMVOCs) | 0.83 g/s (2.69 tpa) | 0.16 g/s (0.058 tpa) |
| Greenhouse gas emissions | Approximately 160,000 tpa CO _{2-e} (Assuming approximately 900 hours per year operation on natural gas and 100 hours per year on liquid fuel). | |
| Average greenhouse intensity | 667.61 kg CO _{2-e} /MWh (Assuming approximately 900 hours per year operation on natural gas and 100 hours per year on liquid fuel). | |

¹ Emissions modelling based on use of normal distillate (500 ppm sulphur content)

² Emissions modelling based on use of ultra low sulphur diesel (50 ppm sulphur content)

Components of changed Proposal:

| Element | Quantities/Description | |
|---|---|--|
| Energy generated per year | Approximately 480 GWh | |
| Plant operating modes | Mode 1 - Peaking plant for 10% of the time at 100% load. Mode 2 - Spinning reserve for 20% of the time at 55% load. | |
| Operating hours | 2,000 hours per year. | |
| Capacity factor | Approximately 21%. | |
| Natural gas | Approximately 6 PJ per year (1,800 hours per year) taken from the Dampier to Bunbury Natural Gas Pipeline. | |
| Liquid fuel (Backup) | Up to 12 ML per year ultra low sulphur diesel (200 hours per year). Sulphur content of diesel - 50 ppm maximum. | |
| Air emissions: | Natural gas (based on 1,800 h/year at full load) | Liquid fuel (based on 200 h/year at full load) |
| Oxides of nitrogen (NO _x) | < 39.1 g/s (254 tpa) | < 114.2 g/s (82.2 tpa) |
| Oxides of sulphur (SO _x) ¹ | 0.0 g/s (negligible tpa) | 4.06 g/s (2.292 tpa) |
| Oxides of sulphur (SO _x) ² | 0.0 g/s (negligible tpa) | 0.406 g/s (0.292 tpa) |
| Particulate matter | 2.0 g/s (12.96 tpa) | 7.62 g/s (5.48 tpa) |
| Carbon monoxide (CO) | 21.7 g/s (140.6 tpa) | 20.9 g/s (15.08 tpa) |
| Polycyclic aromatic hydrocarbons (PAHs) | 0.00087 g/s (0.0056 tpa) | 0.016 g/s (0.0114 tpa) |
| Non-methane volatile organic compounds (NMVOCs) | 0.83 g/s (5.38 tpa) | 0.16 g/s (0.116 tpa) |
| Greenhouse gas emissions | Approximately 320,000 tpa CO _{2-e} (Assuming 1,800 hours per year operation on natural gas and 200 hours per year on liquid fuel). | |
| Average greenhouse intensity | 667.5 kg CO _{2-e} /MWh (Assuming 1,800 hours per year operation on natural gas and 200 hours per year on liquid fuel). | |

¹ Emissions modelling based on use of normal distillate (500 ppm sulphur content)

² Emissions modelling based on use of ultra low sulphur diesel (50 ppm sulphur content)

Dr Paul Vogel
Chairman
Environmental Protection Authority
under delegated authority

Approval date: 9.12.08