



MINISTER FOR THE ENVIRONMENT

Statement No.

000631

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

**POULTRY LITTER-FIRED POWER STATION
MUCHEA, SHIRE OF CHITTERING**

Proposal: The construction and operation of a 108 000 tonnes per annum poultry litter-fired power station at Muchea, as documented in schedule 1 of this statement.

Proponent: Blair Fox Generation WA Pty Ltd

Proponent Address: Suite 1, 164 Beaufort Street, PERTH WA 6000

Assessment Number: 1412

Report of the Environmental Protection Authority: Bulletin 1083

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

Procedural conditions

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.

Published on

- 6 AUG 2003

- 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 written advice.

2 Proponent Commitments

- 2-1 The proponent shall implement the environmental management commitments documented in schedule 2 of this statement.
- 2-2 The proponent shall implement subsequent environmental management commitments which the proponent makes as part of the fulfilment of the conditions in 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 provide evidence to the Minister for the Environment within five years of the date of this statement that the proposal has been substantially commenced 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.

Environmental conditions

5 Compliance Audit and Performance Review

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

1. the 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.

Usually, the Department of Environmental Protection prepares an audit table which can be utilised by the proponent, if required, to prepare an audit program to ensure that the proposal is implemented as required. The Chief Executive Officer is responsible for the preparation of written advice to the proponent, which is signed off by either the Minister or, under an endorsed condition clearance process, a delegate within the Environmental Protection Authority or the Department of Environmental Protection that the requirements have been met.

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 practicable technology;
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 Incinerator Feed

- 6-1 The proponent shall combust a fuel which consists of not less than 70% by weight of poultry litter in the facility. The remainder of the fuel mix shall be clean biomass, the type and maximum percentage of which will be specified in the Licence issued under Part V of the *Environmental Protection Act 1986*.
- 6-2 The proponent shall not combust municipal solid waste, medical waste, biosolids or hazardous waste in the facility.
- 6-3 Prior to submitting a Works Approval application for the plant, the proponent shall prepare an Incinerator Feed Quality Management Plan to demonstrate how conditions 6-1 and 6-2 will be complied with, and how the poultry litter acceptance criteria will be met, to the requirements of the Minister for the Environment on advice of the Environmental Protection Authority.

This Plan shall address:

- 1 establishment of incinerator feed acceptance criteria with respect to constituents and/or contaminants in the feed which can change the stack emission levels;
 - 2 quality control procedures;
 - 3 contingency measures in the event that the criteria referred to in item 1 (above) are not met, including the management of feed not meeting the acceptance criteria, and additional pollution control actions; and
 - 4 complaints response procedures.
- 6-4 The proponent shall implement the Incinerator Feed Quality Management Plan, required by condition 6-3, to the requirements of the Minister for the Environment on advice of the Environmental Protection Authority.

6-5 The proponent shall make the Incinerator Feed Quality Management Plan, required by condition 6-3, publicly available, to the requirements of the Minister for the Environment on advice of the Environmental Protection Authority.

7 Stack Emissions

7-1 Within 12 months following the commencement of operations, the proponent shall demonstrate that all feasible options have been considered to reduce sulphur dioxide (SO₂), hydrogen chloride (HCl) and hydrogen fluoride (HF), and that the plant can meet reduced emission limits for SO₂, HCl and HF which are below the Initial Emission Limits of schedule 1, table 2, consistent with best practicable technology and current industry standards, to the requirements of the Minister for the Environment on advice of the Environmental Protection Authority.

7-2 Prior to combusting more than 25 000 tonnes of poultry litter, the proponent shall present results of testing undertaken to fully characterise all constituents in the stack emissions, including minor emissions, to the requirements of the Minister for the Environment on advice of the Environmental Protection Authority.

7-3 Prior to submitting a Works Approval application for the plant, the proponent shall prepare an Air Toxics Management Plan, to the requirements of the Minister for the Environment on advice of the Environmental Protection Authority.

This plan shall address:

- 1 monitoring and analytical procedures;
- 2 contingency measures / management procedures to deal with exceedances above the limit;
- 3 complaints response procedures; and
- 4 emissions of dioxins, furans, polyaromatic hydrocarbons, volatile organic compounds and "heavy metals".

7-4 The proponent shall make publicly available the following stack emissions reports, findings and information:

- 1 the findings on gaseous stack emissions referred to in condition 7-1;
- 2 the results of testing undertaken to fully characterise all constituents in the stack emissions, including minor emissions, referred to in condition 7-2; and
- 3 the Air Toxics Management Plan, required by condition 7-3,

and, in addition, shall make publicly available a review of the above reports, findings and information by an independent recognised technical specialist, to the requirements of the Minister for the Environment on advice of the Environmental Protection Authority.

8 Odour

- 8-1 Prior to the commencement of operations, the proponent shall prepare an Odour Management Plan, to the requirements of the Minister for the Environment on advice of the Environmental Protection Authority.

This Plan shall address:

- 1 poultry litter acceptance criteria;
 - 2 fuel handling procedures;
 - 3 ambient odour criteria;
 - 4 additional odour control measures which could be employed to reduce odour, such as the use of deodorants or the installation of filters on shed ventilation points;
 - 5 contingency plans to control odour during periods of plant shutdown; and
 - 6 complaints response procedures.
- 8-2 The proponent shall implement the Odour Management Plan, required by condition 8-1, to the requirements of the Minister for the Environment on advice of the Environmental Protection Authority.
- 8-3 The proponent shall make the Odour Management Plan, required by condition 8-1, publicly available, to the requirements of the Minister for the Environment on advice of the Environmental Protection Authority.

9 Ash

- 9-1 Prior to the commencement of operations, the proponent shall prepare an Ash Management Plan, to the requirements of the Minister for the Environment on advice of the Environmental Protection Authority.

This Plan shall address:

- 1 characterisation of the chemical constituents of the bottom ash and determination of the suitability of the bottom ash for use as a fertiliser, with the establishment of appropriate criteria;
- 2 outlining the management and disposal of fly ash; and
- 3 contingency plans for the management and disposal of bottom ash either contaminated or not meeting the criteria.

- 9-2 The proponent shall implement the Ash 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 Ash Management Plan, required by condition 9-1, together with a review of the Plan and its findings by an independent recognised technical specialist, publicly available, to the requirements of the Minister for the Environment on advice of the Environmental Protection Authority.

10 Decommissioning Plans

- 10-1 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 long-term management of ground and surface water systems affected by the evaporation ponds;
- 3 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;
- 4 a conceptual plan for a care and maintenance phase; and
- 5 management of noxious materials to avoid the creation of contaminated areas.

- 10-2 At least 12 months prior to the anticipated date of closure, 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 long-term management of ground and surface water systems affected by the evaporation ponds;
- 3 rehabilitation of all disturbed areas to a standard suitable for the agreed new land use(s); and

- 4 identification of contaminated areas, including provision of evidence of notification and proposed management measures to relevant statutory authorities.
- 10-3 The proponent shall implement the Final Decommissioning Plan required by condition 10-2 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.
- 10-4 The proponent shall make the Final Decommissioning Plan required by condition 10-2 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 Chief Executive Officer of the Department of Environmental Protection will obtain that advice for the preparation of written advice to the proponent.
- 2 The Environmental Protection Authority may seek advice from other agencies, as required, in order to provide its advice to the Chief Executive Officer of 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 The Environmental Protection Authority identified a number of matters for adoption in the *Environmental Protection Act* Works Approval and Licence for the proposal. These include the application of emissions limits for various substances, the specification of emissions to be monitored and the frequency of monitoring, including continuous monitoring for specified emissions. Other matters which can be addressed through the Licence for the proposal include the establishment and maintenance of an emissions inventory and measures for the protection of groundwater and surface water.

Dr Judy Edwards MLA
MINISTER FOR THE ENVIRONMENT

- 6 AUG 2003

Schedule 1

The Proposal (Assessment No. 1412)

The proposal is for the construction and operation of a poultry litter-fired power station which will combust up to 108 000 tonnes per annum of poultry litter and clean biomass.

The plant site is District Swan Suburb Muchea Location 1809 (Brand Highway, Muchea) – In Certificate of Title Volume 1070 Folio 936.

Table 1 - Key Proposal Characteristics

Element	Description
Plant capacity (poultry litter combustion):	up to 108,000 tonnes per annum.
Poultry litter reception and storage shed:	approximately 50 x 120 metres with up to 2000 tonnes storage (enclosed).
Combustor/boiler:	approximately 35 megawatt.
Stack:	approximately 40 metres high.
Steam turbine:	approximately 11 megawatt.
Cooling:	wet surface air-cooled condenser and cooling tower.
Blow down water treatment:	reverse osmosis plant.
Power line (export):	approximately 2.7 kilometres long (22 kilovolts).
Groundwater supply:	approximately 550,000 kilolitres per annum.
Evaporation ponds:	two double-lined ponds of approximately 50 x 100 metres each.
Other:	<ul style="list-style-type: none">• truck washdown station,• sewage treatment plant, and• internal roads.

Schedule 1 (continued)

Table 2 - Initial Emission Limits - Guidance for Licensing under Part V of the *Environmental Protection Act 1986*.

Pollutant	Concentration Limit	Averaging/sampling Time
SO ₂	300 mg/m ³	0.5 hours
HCL	90 mg/m ³	0.5 hours
HF	6 mg/m ³	0.5 hours
NO _x	400 mg/m ³	0.5 hours
CO	100 mg/m ³	8 hours
total particulates	30 mg/m ³	0.5 hours
total heavy metals	700 ug/m ³	between 0.5 and 8 hours
lead	140 ug/m ³	between 0.5 and 8 hours
mercury	50 ug/m ³	between 0.5 and 8 hours
cadmium	14 ug/m ³	between 0.5 and 8 hours
arsenic	5 ug/m ³	between 0.5 and 8 hours
dioxins/furans	0.1 ng/m ³	between 6 and 8 hours

Abbreviations

mg/m³ = milligrams per cubic metre
ug/m³ = micrograms per cubic metre
ng/m³ = nanograms per cubic metre

Figures (attached)

Figure 1 - Power station location; and
Figure 2 - Plant Layout.

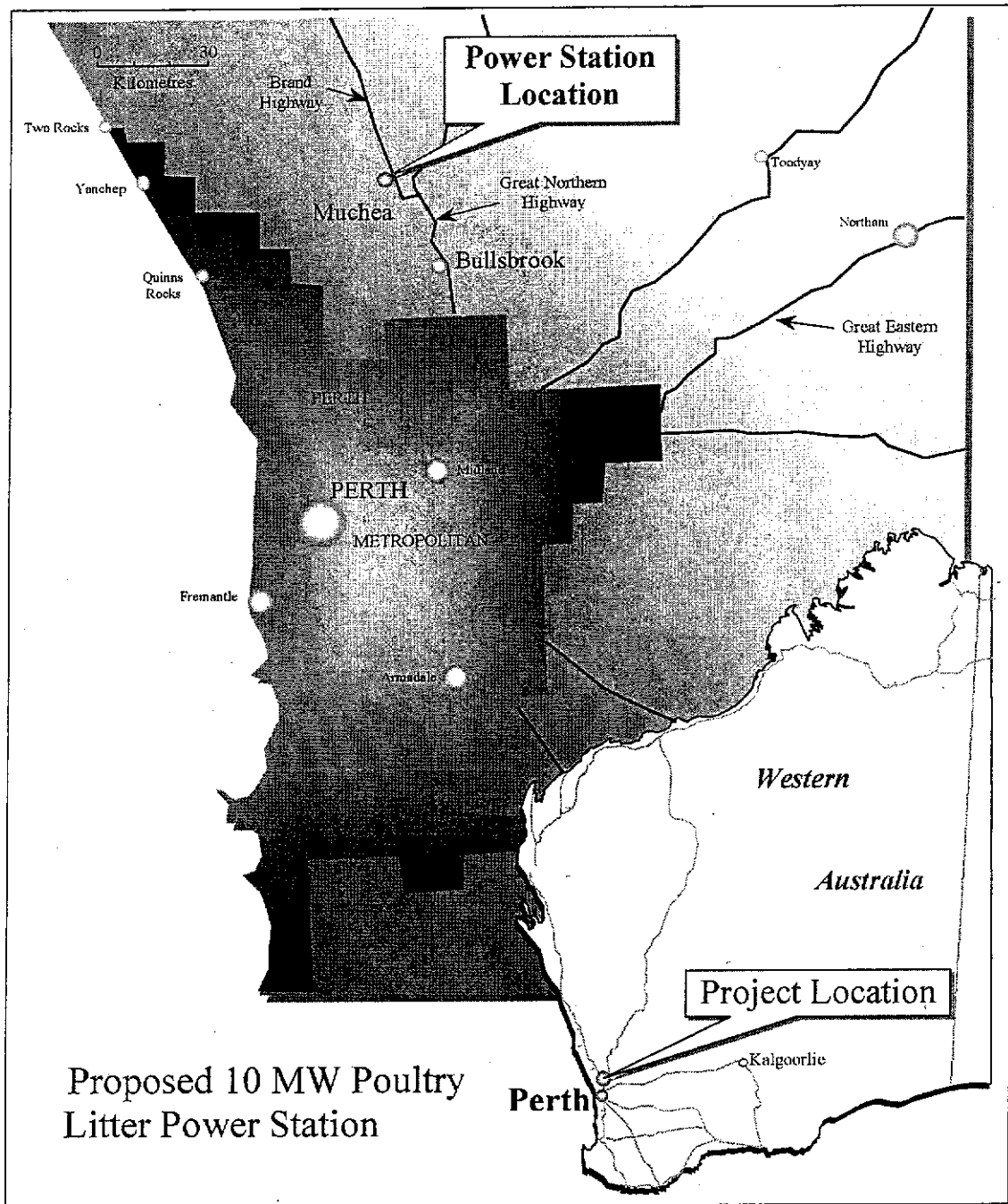


Figure 1: Power station location

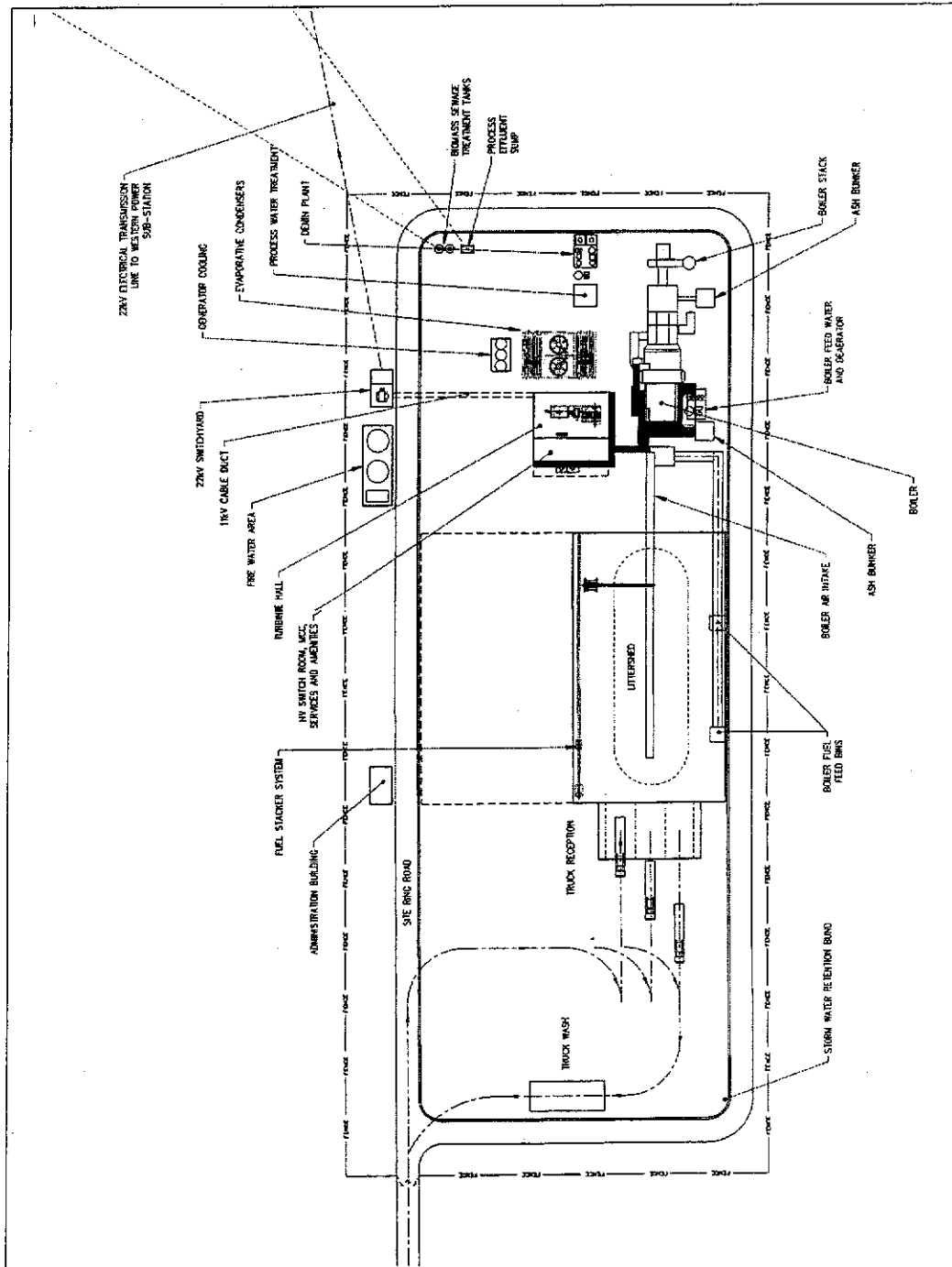


Figure 2: Plant layout

Proponent's Environmental Management Commitments

June 2003

**Poultry Litter-Fired Power Station
Mucnea, Shire of Chittering**

(Assessment No. 1412)

Blair Fox Generation WA Pty Ltd

Poultry Litter-Fired Power Station, Muchea (Assessment No. 1412)
 Proponent's Environmental Management Commitments

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 Environmental Protection.

No.	Topic	Action	Objectives	Timing	Advice
1	General Environmental Management	<ol style="list-style-type: none"> 1. Develop an EMP for the construction phase of the Project. 2. The Construction EMP will be implemented at the site during the construction period by the Proponent and the contractors undertaking the construction activities. 3. Prepare an Environmental Management Plan (EMP) for the site. 4. The EMP will be implemented at the site during operations. 5. Prepare an Environmental Management System (EMS) for the operations of the poultry litter power station prior to commissioning. 6. Implement the EMS during the commissioning and operation of the poultry litter power station. 	To ensure that any potential environmental impacts associated with the construction and operation of the Project are minimised or ameliorated.	Design Construction Design Operation Design Operation	
2	Vegetation	<ol style="list-style-type: none"> 1. Clearing will be minimised. 2. Fencing will be used to protect Vegetation Communities. 3. Weed control will be undertaken annually on site. 	To maintain the abundance, species diversity, geographic distribution and productivity of vegetation communities.	All phases	<ol style="list-style-type: none"> 1. Shire of Chittering 2. The Chittering Valley Landcare Group 3. The Ellenbrook Integrated Catchment Management Group

No.	Topic	Action	Objectives	Timing	Advice
3	Groundwater Management	Prepare a Groundwater Management Plan as a component of the site EMP, which will be submitted to the DEP prior to commissioning.	To ensure that ground water abstraction will not lead to unacceptable impacts on wetland other users and any contamination is detected.	Design	WRC
4	Groundwater Management	Implement the Groundwater Management Plan.	As for commitment 3.	All phases	WRC
5	Surface Water	1. Prepare a Surface Water Management Plan as a component of the site EMP, which will be submitted to the DEP prior to commissioning.	To ensure that receiving water bodies are protected from contamination.	Design	WRC
6	Surface Water	Implement the Surface Water Management Plan.	As for commitment 5.	Operation	WRC
7	Sulphur Dioxide Nitrogen Oxides Particulates Hydrogen fluoride HCL emissions	Develop an EMP for the commissioning phase of the Project. The commissioning EMP will detail a testing program for the boiler stack emissions. The commissioning EMP will be submitted to the DEP for approval prior to the commencement of commissioning.	Ensure that emissions meet the air quality standards requirements of the National Environmental Protection Measure (NEPM) and adopted by the EPA. Ensure that emissions are below the maximum permissible levels. To minimise emissions.	Design	DOH
8	Sulphur Dioxide Nitrogen Oxides Particulates Hydrogen fluoride HCL emissions	As soon as possible following commissioning of the plant, the stack testing program for the boiler stack (developed in conjunction with DEP) will be implemented to verify that the emissions are within the specifications described in schedule 1, table 2.	As for commitment 7.	Operation	DOH
9	Heavy Metals Dioxin and furans	Develop an EMP for the commissioning phase of the Project. The commissioning EMP will detail a stack testing program for the boiler stack. The commissioning EMP will be submitted to the DEP for approval prior to the commencement of commissioning.	Ensure that any emissions of heavy metals meet acceptable standards. To minimise emissions of heavy metals.	Design	DOH
10	Heavy Metals Dioxin and furans	As soon as possible following commissioning of the plant, the stack testing program for the boiler stack (developed in conjunction with DEP) will be implemented to verify that the heavy metal emissions are within the specifications described in schedule 1, table 2.	As for commitment 9.	Operation	DOH

No.	Topic	Action	Objectives	Timing	Advice
11	Greenhouse gases	<ol style="list-style-type: none"> Employ energy efficiency in Plant design and operation. The poultry litter power station will apply for accreditation with the Australian Greenhouse Office. Calculate greenhouse emissions and report to the DEP. 	<p>To minimise greenhouse gas emissions in absolute terms and reduce emissions per unit product to as low as reasonably practicable.</p> <p>To mitigate greenhouse gases emissions in accordance with the Framework Convention on Climate Change 1992, an in accordance with established Commonwealth and State policies including Environmental Protection Authority Interim Guidance No 12 'Minimising Greenhouse Gases'.</p>	All phases	AGO
12	Dust	<ol style="list-style-type: none"> Prepare a Dust Management plan as a component of the EMP for the site. The Dust Management plan will be implemented. 	<p>Ensure that the dust levels generated by the proposal do not adversely impact upon welfare and amenity or cause health problems by meeting statutory requirements and acceptable standards.</p>	<p>Design</p> <p>Construction</p>	
13	Noise	<ol style="list-style-type: none"> Develop an EMP for the commissioning phase of the Project. The commissioning EMP will detail a Noise Management Plan. When the design is finalised, submit to the DEP the results of detailed noise modelling to confirm that 35 dB(A) is met at the nearest residence under worst case conditions. A noise design criterion is that the external noise from any building, or item of equipment outside a building, will be less than 85 dB(A) at 1 metre. The Noise Management Plan will be implemented. 	<p>To protect the amenity of nearby residents from noise impacts resulting from activities associated with the proposal by ensuring that noise levels meet statutory requirements specified in the <i>Environmental Protection (Noise) Regulations 1997</i>.</p>	Design	
14	Noise	<ol style="list-style-type: none"> A noise monitoring survey will be undertaken once the Plant is operational to ensure that noise levels meet the regulations. Should noise emissions from the proposal, when implemented, cause annoyance to nearby residences, the proponent is committed to using its best endeavors to remedy the situation. 	<p>As for commitment 13.</p>	Operation	

No.	Topic	Action	Objectives	Timing	Advice
15	Hazardous Materials	Prepare a Hazardous Materials plan as a component of the EMP for the site, which will be submitted to the DEP prior to commissioning. The Hazardous Materials Plan will be implemented.	Ensure that any hazardous materials to be used on site are transported and stored and used in a safe and environmentally acceptable manner.	Design Operation	
16	Waste Management	Prepare a Waste Management Plan based on the principles of Reduce, Recycle and Re-use. The Waste Management Plan will be a component of the site EMP, which will be submitted to the DEP prior to commissioning.	Where possible, waste should be minimised, reused or recycled.	Design	
17	Waste Management	The Waste Management Plan will be implemented.	As for commitment 16.	Operation	
18	Visual amenity	1. The buildings and civil works will be consistent with Shire of Chittering guidelines for building materials. 2. In the longer term, the screening trees and shrubs to be planted around the facility.	Visual amenity of the area adjacent to the project should not be unduly affected by the proposal.	Design Construction	Shire of Chittering

Abbreviations

AGO Australian Greenhouse Office
DEP Department of Environmental Protection
DOH Department of Health
EPA Environmental Protection Authority
WRC Water and Rivers Commission