



MINISTER FOR THE ENVIRONMENT

Statement No.

000662

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

**REGIONAL RESOURCE RECOVERY FACILITY  
LOT 505, NEERABUP INDUSTRIAL AREA, CITY OF WANNEROO**

**Proposal:** The construction and operation of a Resource Recovery Facility on Lot 505 in the Neerabup Industrial Area to process up to 100 000 tonnes per annum of municipal solid waste and up to 40 000 tonnes per annum of biosolids and animal manure, as documented in schedule 1 of this statement.

There may also be biogas capture and power generation.

**Proponent:** Mindarie Regional Council

**Proponent Address:** Lot 17, Marmion Avenue, MINDARIE WA 6030

**Assessment Number:** 1461

**Report of the Environmental Protection Authority:** Bulletin 1142

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

**1 Implementation**

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

**2 Proponent Commitments**

2-1 The proponent shall implement the environmental management commitments documented in schedule 2 of this statement, to the requirements of the Minister for the Environment on advice of the Environmental Protection Authority.

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13 OCT 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 Environment of any change of contact name and address within 60 days of such change.

### **4 Commencement and Time Limit of Approval**

- 4-1 The proponent shall substantially commence the proposal within five years of the date of this statement or the approval granted in this statement shall lapse and be void.

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

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

The application shall demonstrate that:

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

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

## 5 Compliance Audit and Performance Review

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

1. the status of implementation of the proposal as defined in schedule 1 of this statement;
2. evidence of compliance with the conditions and commitments; and
3. the performance of the environmental management plans and programs.

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

5-2 The proponent shall submit a performance review report every five years 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.

5-3 The proponent may submit a report prepared by an auditor approved by the Department of Environment under the "Compliance Auditor Accreditation Scheme" to the Chief Executive Officer of the Department of Environment 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 Air Emissions**

- 6-1 Prior to commencement of construction of the facility, the proponent shall have an independent expert undertake a peer review of the detailed design of the total odour control system with particular emphasis on the design of the biofilter and the process control, to the requirements of the Minister for the Environment on advice of the Environmental Protection Authority.
- 6-2 The proponent shall submit a copy of the peer review report referred to in condition 6-1 to the Department of Environment with the application for the works approval.

## **7 Odour**

- 7-1 Prior to commencement of operation, the proponent shall prepare an Odour Management Plan to manage the impacts of odour on health and amenity, to the requirements of the Minister for the Environment on advice of the Environmental Protection Authority.

This Plan shall address the following:

1. the biofilter acclimation period;
  2. the procedures for the replacement of the biofilter media;
  3. an initial dynamic olfactometry determination;
  4. regular checks of biofilter loading to ensure the biofilter is balanced and to identify any short circuits (eg surface flow rate measurements and smoke tests);
  5. regular qualitative determination of odour from the facility;
  6. contingency plans during upset or maintenance conditions; and
  7. complaint registration, investigation and response.
- 7-2 The proponent shall implement the Odour Management Plan, 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 Odour Management Plan, required by condition 7-1, publicly available, to the requirements of the Minister for the Environment on advice of the Environmental Protection Authority.

## **8 Decommissioning Plans**

- 8-1 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 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.
- 8-2 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 and clean-up of contaminated areas, including provision of evidence of notification and proposed management measures to relevant statutory authorities.
- 8-3 The proponent shall implement the Final Decommissioning Plan required by condition 8-2 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.
- 8-4 The proponent shall make the Final Decommissioning Plan required by condition 8-2 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 Environment for the preparation of written notice to the proponent.

- 2 The Environmental Protection Authority may seek advice from other agencies or organisations, as required, in order to provide its advice to the Department of Environment.
- 3 Where a condition lists advisory bodies, it is expected that the proponent will obtain the advice of those listed as part of its compliance reporting to the Department of Environment.

### Notes

- 1 The Minister for the Environment will determine any dispute between the proponent and the Environmental Protection Authority or the Department of Environment over the fulfilment of the requirements of the conditions.
- 2 The proponent is required to apply for a Works Approval, Licence and Registration 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

13 OCT 2004

## Schedule 1

### Resource Recovery Facility, Neerabup Industrial Area (Assessment No. 1461)

The proposal is for the construction and operation of a Resource Recovery Facility for the separation/processing of waste.

The environmental approval is for two generic technologies:

- biological – composting, and
- biological – digestion with biogas recovery.

The majority of waste delivered to the site will be municipal solid waste collected each week from residences in the municipalities. This waste stream may be mixed with biosolids.

The plant consists of an enclosed waste receival area where waste collection trucks enter to tip the waste. The waste is sorted to remove oversized and other items not suitable for the process.

The waste is then processed in enclosed vessels where it is broken down by bacteria before removal of any remaining inorganic material. The resulting compost is then left to mature in windrows inside the building.

For the option with biogas recovery, the gas (predominately methane) is collected and used in one or more reciprocating motors to produce electricity.

All materials handling areas of the plant will be enclosed and maintained under negative pressure, with the extracted air being directed to a biological filter (biofilter) to remove odour.

**Table 1 – Key Proposal Characteristics**

<b>Element</b>	<b>Description/Quantities</b>
Location	Lot 505, Neerabup Industrial Area, City of Wanneroo.
Nature of operation	Resource recovery, including recycling and waste processing.
Total area of site	approximately 20 hectares.
Area required	approximately 10 hectares.
<b>Inputs</b>	<ul style="list-style-type: none"><li>• municipal solid waste - up to 100 000 tonnes per annum (excluding co-mingled dry recyclables);</li><li>• biosolids – up to 33 000 tonnes per annum; and</li><li>• animal manure – up to 7 000 tonnes per annum.</li></ul>
<b>Outputs/products</b>	<ul style="list-style-type: none"><li>• stabilised compost;</li><li>• segregated recyclables (paper, plastic, glass, ferrous and non-ferrous metals);</li><li>• residual waste (to landfill); and</li><li>• electricity (optional).</li></ul>

<p><b>Major components</b></p>	<ul style="list-style-type: none"> <li>• enclosed waste receival building of up to approximately 6 000 square metres, which is maintained under negative pressure;</li> <li>• various vessels/digesters for biological decomposition of organic waste (dependant on final technology provider) capable of processing 100 000 tonnes of waste and 40 000 tonnes of biosolids and animal manure per annum;</li> <li>• associated conveyors and screening equipment;</li> <li>• enclosed compost refining/maturation building of up to approximately 10 000 square metres, which is maintained under negative pressure;</li> <li>• external sealed compost (mature) storage area;</li> <li>• one or more biofilters consisting of two or more cells;</li> <li>• biogas treatment and storage cleanup;</li> <li>• up to three reciprocating engines; and</li> <li>• electrical generating equipment capable of producing up to 3 Megawatts.</li> </ul>
<p><b>Process water</b></p>	<p>up to 150 000 kilolitres per annum.</p>
<p><b>Other infrastructure</b></p>	<ul style="list-style-type: none"> <li>• administration building;</li> <li>• weighbridge/s; and</li> <li>• access roads and car parks.</li> </ul>



**Proponent's Environmental Management Commitments**

6 July 2004

**REGIONAL RESOURCE RECOVERY FACILITY  
LOT 505, NEERABUP INDUSTRIAL AREA  
CITY OF WANNEROO**

(Assessment No. 1461)

**Mindarie Regional Council**

Proponent's Environmental Management Commitments – July 2004

**REGIONAL RESOURCE RECOVERY FACILITY, LOT 505, NEERABUP INDUSTRIAL AREA, CITY OF WANNEROO**  
(Assessment No. 1461)

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

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

Topic	Action	Objective	Timing	Advice
1 Construction	<p>Prepare and Implement a <b>Construction Environmental Management Plan</b> which addresses:</p> <p><b>Design:</b></p> <ol style="list-style-type: none"> <li>1. Measures to limit vegetation clearing;</li> <li>2. Water supply;</li> <li>3. Drainage design;</li> <li>4. Evaluation of options, and where practical, implementation of options to harvest and use stormwater; and</li> <li>5. Noise management measures.</li> </ol>	<p>To ensure that the environmental requirements are integrated and built into project design.</p> <p>To ensure that construction impacts (direct and indirect) are minimised.</p> <p>To ensure that Works Approval conditions issued by the DoE pursuant to Part V of the <i>Environmental Protection Act</i> are complied with at all times.</p>	Prior to site preparation work commencing.	

Topic	Action	Objective	Timing	Advice
	<p><b>Construction:</b></p> <ol style="list-style-type: none"> <li>6. Works Approval conditions</li> <li>7. Measures to limit vegetation clearing;</li> <li>8. Construction noise and vibration;</li> <li>9. Dust management;</li> <li>10. Noise management;</li> <li>11. Fire management;</li> <li>12. Movement, storage and refuelling of machinery during construction;</li> <li>13. Storage and handling procedures for all construction materials;</li> <li>14. Description of environmental standards, safeguards and emergency responses;</li> <li>15. Licensing requirements and approvals;</li> <li>16. Public relations and communication;</li> <li>17. Monitoring; and</li> <li>18. Progress and compliance reporting.</li> </ol>	<p>To ensure that environmental approval granted by the Minister for the Environment pursuant to Part IV of the <i>Environmental Protection Act</i> is complied with at all times.</p> <p>To minimise the abstraction and use of groundwater.</p>		

Topic	Action	Objective	Timing	Advice
2	<p>Prepare an <b>Environmental Management System</b> which addresses:</p> <p><b>Air Emissions</b></p> <ol style="list-style-type: none"> <li>1. Monitoring air emissions in accordance with Licence conditions issued pursuant to Part V of the <i>Environmental Protection Act</i>.</li> </ol> <p><b>Compost Quality Monitoring:</b></p> <ol style="list-style-type: none"> <li>2. Compost criteria (including contaminants);</li> <li>3. Method of compost monitoring;</li> <li>4. Waste collection method;</li> <li>5. Waste pre-sorting, compost screening and separation methods;</li> <li>6. Monitoring (Occupational Health and Safety, and environmental);</li> <li>7. Batch/quality control measures;</li> <li>8. Compatibility of compost with end use;</li> <li>9. Contingency plan for non-conforming compost; and</li> <li>10. Reporting.</li> </ol> <p><b>Odour Monitoring:</b></p> <ol style="list-style-type: none"> <li>11. Proposed criteria;</li> <li>12. Odour monitoring methodology;</li> <li>13. Odour control measures;</li> <li>14. Monitoring and maintenance of odour control equipment; and</li> <li>15. Reporting.</li> </ol>	<p>Ensure the proposal is operated in accordance with 'Best Practice' and emissions to the environment are below relevant criteria.</p> <p>Ensure monitoring results are available to the community.</p> <p>Ensure Licence conditions issued by the DoE pursuant to Part V of the <i>Environmental Protection Act</i> are complied with at all times.</p> <p>Ensure environmental approval granted by the Minister for the Environment pursuant to Part IV of the <i>Environmental Protection Act</i> is complied with at all times.</p>	Prior to commissioning	

Topic	Action	Objective	Timing	Advice
	<p><b>Surface Water Quality:</b></p> <ul style="list-style-type: none"> <li>16. Stormwater treatment and disposal;</li> <li>17. Separation of stormwater and process water;</li> <li>18. Management of excess process water;</li> <li>19. Maintenance of stormwater equipment, treatment and disposal equipment; and</li> <li>20. Spills management and clean-up procedures.</li> </ul> <p><b>Noise Monitoring:</b></p> <ul style="list-style-type: none"> <li>21. Proposed criteria;</li> <li>22. Noise monitoring methodology;</li> <li>23. Noise control measures; and</li> <li>24. Reporting.</li> </ul> <p><b>Emergency Response and Contingency Measures:</b></p> <ul style="list-style-type: none"> <li>25. The risks associated with operation of the facility;</li> <li>26. Method of monitoring the risks;</li> <li>27. The measures to control risk;</li> <li>28. Emergency response and contingency procedures;</li> <li>29. Public complaints and response procedures;</li> <li>30. Public relations and communication; and</li> <li>31. Reporting.</li> </ul>			

Topic	Action	Objective	Timing	Advice
	<p><b>Review and Improvement of Environmental Management System:</b></p> <ul style="list-style-type: none"> <li>32. Public consultation;</li> <li>33. Review period and innovation process;</li> <li>34. Education and training of employees;</li> <li>35. Procedures and practices;</li> <li>36. Allocation of employee roles and responsibilities; and</li> <li>37. Reporting and communication mechanisms.</li> </ul>			

Topic	Action	Objective	Timing	Advice
3	Release the <b>Environmental Management System</b> for a four-week public review period.	Ensure that the community is consulted and given the opportunity to provide input into the <b>Environmental Management System</b> .	Prior to commissioning	
4	Implement the <b>Environmental Management System</b> .	<p>Ensure the proposal is operated in accordance with 'Best Practice' and emissions to the environment are below relevant criteria.</p> <p>Ensure monitoring results are available to the community.</p> <p>Ensure Licence conditions issued by the DoE pursuant to Part V of the <i>Environmental Protection Act</i> are complied with at all times.</p> <p>Ensure environmental approval granted by the Minister for the Environment pursuant to Part IV of the <i>Environmental Protection Act</i> is complied with at all times.</p>	Prior to commissioning	

Topic	Action	Objective	Timing	Advice
5 Waste Collection	<p>Prepare and Implement a <b>Regional Waste Management Strategy</b> which addresses:</p> <ol style="list-style-type: none"> <li>1. The advantages and disadvantages of a one-bin and multi-bin system for maximising recycling and homogenising the waste stream for the facility;</li> <li>2. Identifying which bin collection system is most suitable for the different resource recovery facility technology options; and</li> <li>3. Community consultation and education.</li> </ol>	To maximise recycling rates, waste separation and consistency of waste for processing in the facility	Prior to tender award	
6 Bush Forever Site	Maintain the native vegetation on the eastern portion of Lot 505 Pedrick Road Neerabup, as delineated by Bush Forever Site 295.	To maintain the integrity and values of Bush Forever Site 295.	On going	Bush Forever Office
7 Air Emissions	Undertake an air emissions characterisation study (stack concentrations) for nitrogen and sulphur compounds, volatile organic compounds, metals and other pollutants that might pose a significant health risk.	To characterise air emissions from exhaust stacks.	During commissioning	

#### Abbreviations

DoE = Department of Environment