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

REMEDICATION OF CONTAMINATED SITES ON MORANGUP ROAD,
SHIRE OF TOODYAY

Proposal: The remediation of contaminated sites on part lots 3 (Certificate of
Title volume 1664, folio 729), 11 (Certificate of Title volume 1514,
folio 102), 12 (Certificate of Title volume 1514, folio 150) and 81
(Certificate of Title volume 1664, folio 747) Morangup Road, to
restore the beneficial use of the land to rural activities, as
documented in schedule 1 of this statement.

Proponent: Department of Environmental Protection

Proponent Address: 141 St George’s Terrace, Perth WA 6000

Assessment Number: 1391

Report of the Environmental Protection Authority: Bulletin 1026

The proposal to which the above report of the Environmental Protection Authority relates may
be implemented subject to the following conditions and procedures:

Procedural conditions

1 Implementation

1.1 Subject to these conditions and procedures, the proponent shall implement the proposal
as documented in schedule 1 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 and
Heritage determines, on advice of the Environmental Protection Authority, is
substantial, the proponent shall refer the matter to the Environmental Protection
Authority.

Published on

- 1 MAR 2002

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E-MAIL: judy-edwards@dpc.wa.gov.au
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 and Heritage determines, on advice of the Environmental Protection Authority, is not substantial, those changes may be effected.

2 Proponent Commitments

2-1 The proponent shall implement the consolidated 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 conditions and procedures in this statement.

3 Proponent

3-1 The proponent for the time being nominated by the Minister for the Environment and Heritage 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 and Heritage has exercised the Minister’s power under section 38(7) of the Act to revoke the nomination of that proponent and nominate another person in respect of the proposal.

3-2 Any request for the exercise of that power of the Minister for the Environment and Heritage referred to in condition 3-1 shall be accompanied by a copy of this statement endorsed with an undertaking by the proposed replacement proponent to carry out the proposal in accordance with the conditions and procedures set out in the statement.

3-3 The proponent shall notify the Environmental Protection Authority of any change of proponent contact name and address within 30 days of such change.

4 Commencement

4-1 The proponent shall provide evidence to the Minister for the Environment and Heritage within five years of the date of this statement that the proposal has been substantially commenced.

4-2 Where the proposal has not been substantially commenced within five years of the date of this statement, the approval to implement the proposal as granted in this statement shall lapse and be void unless the Minister for the Environment and Heritage grants an extension referred to in condition 4-4. The Minister will determine any question as to whether the proposal has been substantially commenced.
4-3 The proponent shall make application to the Minister for the Environment and Heritage for any extension of approval for the substantial commencement of the proposal beyond five years from the date of this statement at least six months prior to the expiration of the five-year period referred to in conditions 4-1 and 4-2.

4-4 Where the proponent demonstrates to the requirements of the Minister for the Environment and Heritage on advice of the Environmental Protection Authority that the environmental parameters of the proposal have not changed significantly, then the Minister may grant an extension not exceeding five years for the substantial commencement of the proposal.

Environmental conditions

5 Compliance Auditing

5-1 Unless otherwise specified, the Chairman of the Environmental Protection Authority is responsible for assessing compliance with the conditions, procedures and commitments contained in this statement and for issuing formal written advice that the requirements have been met.

5-2 Where compliance with any condition, procedure or commitment is in dispute, the matter will be determined by the Minister for the Environment and Heritage.

Note: The proponent will submit a Validation Report to the Environmental Protection Authority, in accordance with commitment no. 9 (schedule 2).

Dr Judy Edwards MLA
MINISTER FOR THE ENVIRONMENT AND HERITAGE

1 Mar 2002
The Proposal (Assessment No. 1391)

The proponent will remediate the three sites, and a small area external to one of the sites, and return the land to a rural beneficial use.

The three contaminated sites occur on private properties located on the west side of Morangup Road, approximately 25 kilometres southwest of Toodyay. They are depicted in figure 1 (attached) and are listed below:

<table>
<thead>
<tr>
<th>Site</th>
<th>Lot Number</th>
<th>Area of Property (square metres)</th>
<th>Approximate Area of contamination (square metres)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>3</td>
<td>100,000</td>
<td>9,700</td>
</tr>
<tr>
<td>B</td>
<td>81</td>
<td>100,000</td>
<td>13,700</td>
</tr>
<tr>
<td>C</td>
<td>11</td>
<td>94,000</td>
<td>11,400</td>
</tr>
</tbody>
</table>

A small amount of contamination from Site C has entered the adjacent Lot 12. This contamination extends over approximately 700 square metres and will be removed as part of the remediation of Site C.

The remediation of these sites will involve:

1. removal of all infrastructure and fences within the contaminated area, including a large shed on Site C and possibly internal fences on Sites A and C;
2. removal of contaminated soil by:
   a wetting agent applied to contaminated soil four and two weeks prior to excavation and the soil ripped and thoroughly wet;
   b soil wetting agent and water applied to contaminated area two days prior to excavation and to the working face, throughout excavation and loading activities;
   c excavating top 250mm of contaminated soil and placing into trucks for disposal;
   d the excavated area being sampled and all soil with a total phenol concentration above 9mg/kg excavated for disposal;
   e stockpiling the soil from uncontaminated areas over contaminated caprock excavated using a backhoe for use as backfill;
   f using the uncontaminated material and imported clean fill to backfill excavated areas to within 250mm of the finished surface; and
   g using imported topsoil used to backfill upper 250mm;
3. delineation of contamination boundaries (9mg/kg of total phenols) within the caprock and sealing the contaminated caprock by grouting or with an impervious layer;
4. validation of the adequacy of the remedial works by sampling and analysis;

5. transport of the contaminated soil (approximately 11,000 cubic metres) in trucks fitted with covered and sealed trays to the Colebatch Road Class II landfill (located in Northam approximately 45 kilometres from the site) or to any other approved landfill for disposal;

6. rehabilitation of the sites in accordance with future requirements of the land, following negotiations directly with the landowners;

7. monitoring of groundwater contamination and restrictions on its use, as necessary. If monitoring shows contamination levels above criteria, the Environmental Protection Authority will determine appropriate action on the advice of the Water and Rivers Commission; and

8. preparation of a validation report at the conclusion of remedial works (see commitment no. 9, schedule 2.)
FIGURE 1
LOCATION OF CONTAMINATED SITES ON MORANGUP ROAD
Proponent’s Consolidated Environmental Management Commitments

January 2002

REMEDIATION OF CONTAMINATED SITES
ON MORANGUP ROAD
SHIRE OF TOODYAY

(Assessment No. 1391)

DEPARTMENT OF ENVIRONMENTAL PROTECTION
<table>
<thead>
<tr>
<th>No.</th>
<th>Topic</th>
<th>Actions</th>
<th>Objectives</th>
<th>Timing</th>
<th>Requirements/Advice</th>
</tr>
</thead>
</table>
| 1   | Environmental Management Plan        | Develop an environmental management plan for the remediation of contaminated soil and caprock at Morangup, addressing:  
1. Removal and restoration of fences and infrastructure  
2. Occupational health and safety  
3. Dust monitoring and management (including a two day dust trial to test monitoring equipment and establish background levels, and development of dust action levels, established on advice from the Department of Health)  
4. Dust health effects: (1) Seek independent medical advice, in consultation with appellant(s) [against EPA Report & Recommendations], to determine whether dust generated is detrimental to the existing health status of appellant(s); (2) Take appropriate action to reduce impacts of the works; and, (3) Arrange temporary relocation of appellant(s) if necessary, based on medical advice received.  
5. Noise and vibration  
6. Surface water management  
7. Contaminated caprock delineation and capping  
8. Excavation of contaminated soil  
9. Transport of contaminated soil  
10. Management of contaminated soil at landfill site  
11. Validation prior to backfilling  
12. Rehabilitation, including prevention of soil erosion  
13. Public communication and complaints resolution | To ensure that the contaminated sites at Morangup are remediated to a level and in a manner that is protective of human health and the environment.                                                                 | Prior to commencement of full scale remedial works.                                                                                                                                                    | Requirements of: EPA  
On advice from: DOH, WRC, Worksafe                                               |----------------------------------------------------------|
<table>
<thead>
<tr>
<th></th>
<th>Environmental Management Plan</th>
<th>Make the Environmental Management Plan publicly available.</th>
<th>To ensure that the contaminated sites at Morangup are remediated to a level and in a manner that is protective of human health and the environment.</th>
<th>Prior to commencement of full scale remedial works.</th>
<th>Requirements of: EPA</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>Environmental Management Plan</td>
<td>Implement the Environmental Management Plan.</td>
<td>To ensure that the contaminated sites at Morangup are remediated to a level and in a manner that is protective of human health and the environment.</td>
<td>At commencement of full-scale remedial works.</td>
<td>Requirements of: EPA</td>
</tr>
<tr>
<td>4</td>
<td>Aboriginal culture and heritage</td>
<td>Conduct ethnographic and archaeological surveys of the area. This will include consultation with all Aboriginal interest groups so that all Aboriginal sites on the designated land are avoided or identified.</td>
<td>To protect Aboriginal culture and heritage.</td>
<td>Prior to commencement of full-scale remediation works.</td>
<td>Requirements of: EPA On advice from: DIA</td>
</tr>
<tr>
<td>5</td>
<td>Public Consultation</td>
<td>Liaise directly with affected property owners and residents adjacent to the contaminated sites at Morangup and provide regular community consultation and communication process by regular newsletters and information sessions for the public.</td>
<td>To inform the community of the progress of remediation at the Morangup contaminated sites and facilitate communication between the affected landowners and adjacent residents and the proponent on the performance of the remedial works. To address issues as they arise and communicate details regarding progress, timing, impacts and likely completion, between the involved parties.</td>
<td>Prior to, during remedial works and at the conclusion of the validation report.</td>
<td>Requirements of: EPA</td>
</tr>
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<td>6</td>
<td>Groundwater Monitoring and Management Plan</td>
<td>Develop a long term monitoring and management plan for contaminated groundwater at and down hydraulic gradient of the contaminated sites at Morangup, addressing: - Siting and construction of additional bores; - Monitoring program (analyses and frequency); - Management to restrict access to contaminated groundwater; and - Contingency measures.</td>
<td>To ensure future groundwater quality is managed to protect human health and the environment.</td>
<td>At completion of remedial works.</td>
<td>Requirements of: EPA On advice from: WRC</td>
</tr>
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<td>To ensure future groundwater quality is managed to protect human health and the environment.</td>
<td>At completion of remedial works.</td>
<td>Requirements of: EPA On advice from: WRC</td>
</tr>
<tr>
<td>9</td>
<td>Validation Report</td>
<td>Submit a report to the EPA, which provides evidence of conformity to the conditions and commitments for the project.</td>
<td>To document that the clean up of the contaminated sites at Morangup has been performed in accordance with EPA requirements.</td>
<td>Within two months following completion of remedial works.</td>
<td>Requirements of: EPA On advice from: DOH</td>
</tr>
</tbody>
</table>

Legend:

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>DOH</td>
<td>Department of Health</td>
</tr>
<tr>
<td>DIA</td>
<td>Department of Indigenous Affairs</td>
</tr>
<tr>
<td>EPA</td>
<td>Environmental Protection Authority</td>
</tr>
<tr>
<td>WRC *</td>
<td>Water and Rivers Commission</td>
</tr>
</tbody>
</table>

* - Liable to change.