

3. LEGISLATIVE FRAMEWORK

3.1 PREVIOUS ENVIRONMENTAL APPROVALS

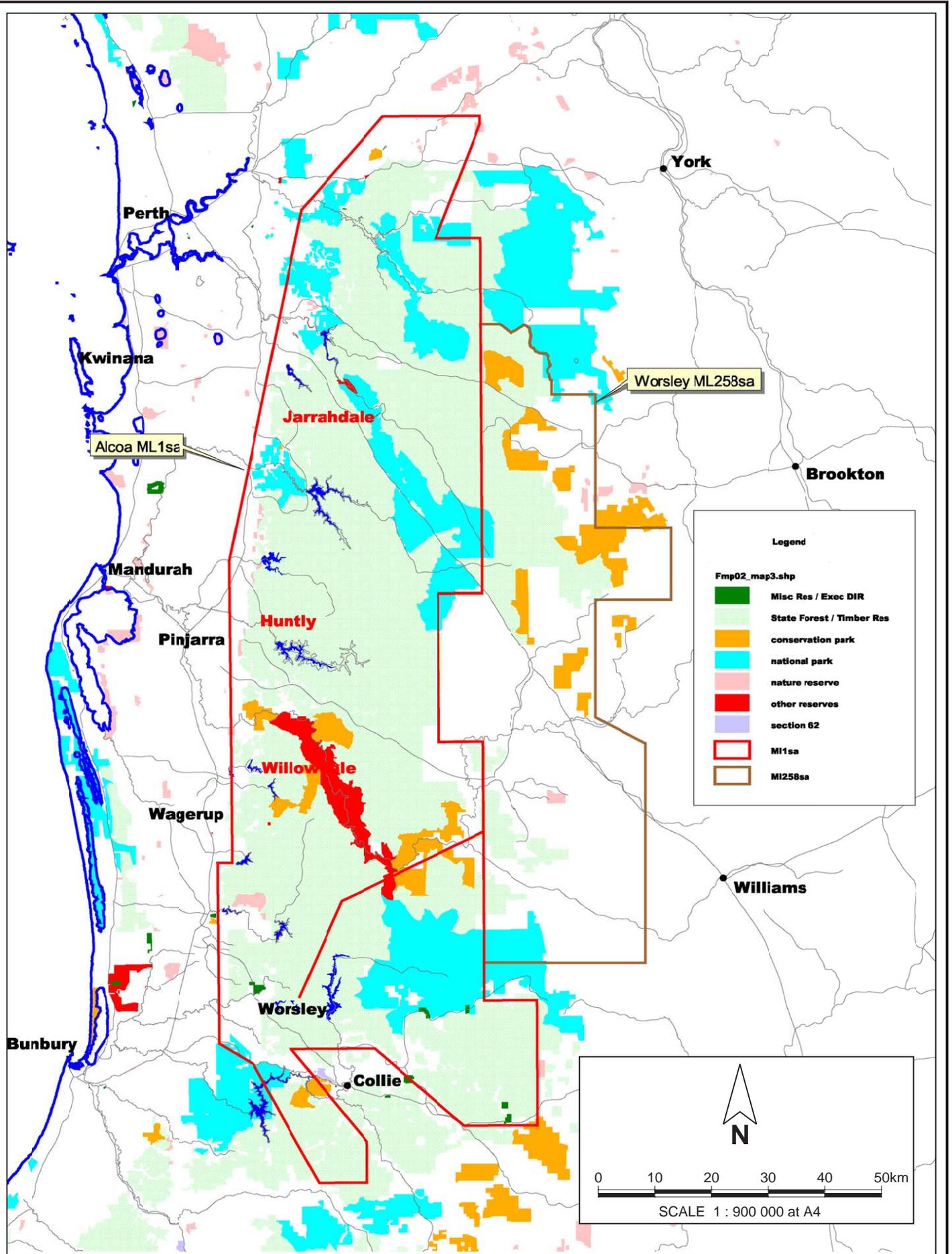
Wagerup refinery was first granted State government approval in 1978 under the *Alumina Refinery (Wagerup) Agreement Act 1978* and *Acts Amendment 1978*. The approval was for a production capacity of up to 2 Mtpa. The first production unit was commissioned in 1984 and had a capacity of 670,000 tpa which was expanded to 840,000 tpa in 1988.

Alcoa's Mineral Lease 1SA (ML1sa), which encompasses an area in the Darling Range from east of Perth to east of Bunbury (refer Figure 4), was granted in 1961 under the *Alumina Refinery Agreement Act 1961*. Alcoa has approval to mine within ML1sa subject to submitting draft five year mine plans and associated environmental management programmes to the State's Mining and Management Programme Liaison Group (MMPLG) on an annual basis. Details of the MMPLG process are provided in Section 4.3. The EPA has advised that mining operations managed by the MMPLG process in ML1sa are addressed by an existing approval process and are not to be included in the ERMP.

In 1989, Alcoa was granted approval to expand production at Wagerup refinery from 840,000 Mtpa to 1.5 Mtpa. The expansion involved the construction of a second production unit which required formal assessment in the form of a Consultative Environmental Review (CER).

In 1995, Alcoa was granted further approval for a third production unit, increasing the maximum capacity from 1.5 Mtpa to 3.3 Mtpa. This expansion was also formally assessed via a CER. Following this approval being obtained, an upgrade of the refinery commenced in 1998-99 taking the total alumina production capability to approximately 2.2 Mtpa. The current operating licence allows an annual alumina production of 2.35 Mtpa, with permission to increase to 2.5 Mtpa subject to certain conditions being met. The refinery has met these conditions and may produce up to 2.5 Mtpa during the licence period, which is due for renewal in August 2005.

While approval exists for a third production unit, this was for an overall production capacity of 3.3 Mtpa. However with advances in technology, the construction of a third production unit would take production to 4.7 Mtpa. Consequently the EPA and the Minister for Environment determined the Proposal should be re-assessed, leading to the preparation of this ERMP.



Alcoa World Alumina Australia
 ALCOA WAGERUP REFINERY EXPANSION
 ENVIRONMENTAL REVIEW AND MANAGEMENT PROGRAMME

MINING LEASE ML1sa

Figure 4



Drawn: KP

Date: 04/05

3.1.1 Long-Term Residue Management Strategy

Alcoa has a Long-Term Residue Management Strategy (LTRMS) in place for each of its Western Australian refineries, including Wagerup. The purpose of the LTRMS is to:

- identify the future residue storage requirements for each refinery;
- ensure that the location and design of new areas is optimised;
- reduce environmental impacts;
- consider long-term land use issues; and
- to outline a closure strategy for the residue storage area.

The LTRMS is prepared through consultation with the local community, local government and the Residue Planning Liaison Group (RPLG), which was set up in 1992 to provide advice to the Minister on residue management issues. The RPLG comprises representatives of government agencies and is chaired by the Department of Industry and Resources (DoIR). The LTRMS is submitted to the RPLG for endorsement and was first accepted by the Minister for the Environment in 1997. A major review of Wagerup refinery's future requirements and long-term alternatives for residue (LTRMS) was undertaken in 2001 and then further updated in 2003. A major review of the LTRMS is planned to commence in 2005 in preparation for submission to the Minister for the Environment in 2006.

The Proposal would see an increase in the rate of residue creation, thereby accelerating the need for long term residue planning. This ERMP recognises and evaluates the environmental implications of accelerated residue creation, however the precise location of future residue drying areas within Alcoa's landholdings will be determined through future LTRMS and associated consultation processes.

3.2 CURRENT APPROVAL LEGISLATION

The Alcoa Corporate Environmental Policy and Principles requires the Wagerup refinery to comply with all applicable legislation. A documented process is in place at the refinery to ensure relevant legislation is identified and kept up to date on the site legal register, referred to as the Environmental Legislative Review Manual. This Manual is updated quarterly and a copy of the Manual as well as copies of all relevant legislation is held in the refinery library.

As outlined above, the Wagerup refinery operates under the *Alumina Refinery (Wagerup) Agreement Act 1978* and *Acts Amendment 1978* and is subject to Ministerial conditions pursuant to the Part IV provisions of the *Environmental Protection Act 1986*. The Ministerial conditions were granted in 1995 and subsequently updated in 2001.

Additional environmental approvals and consents include the following:

- Environmental Licence and project Works Approval pursuant to Part V of the *Environmental Protection Act and Regulations (1986, 1987)*;
- Surface and groundwater extraction licences pursuant to *Rights in Water and Irrigation Act 1914*;
- Dangerous Goods Storage Licence pursuant to the *Explosives and Dangerous Goods Act and Regulations (1965, 1992)*;
- Annual approval of mine plans and associated management programs by the Minister for State Development on recommendation from the MMPLG; and
- Development of the LTRMS in consultation with the RPLG and endorsement of these plans by the Minister for Environment.

3.3 STATE GOVERNMENT LEGISLATION

In addition, the following State Government legislation is applicable to the Proposal:

- *Aboriginal Heritage Act 1972*;
- *Agriculture and Related Resources Protection Act 1976*;
- *Bacteriolytic Treatment of Sewage and Disposal of Effluent and Liquid Waste 1985*;
- *Bush Fires Act 1954*;
- *Conservation and Land Management Act 1984*;
- *Contaminated Sites Act 2004*¹;
- *Dangerous Goods (Transport) Act 1998*;
- *Dangerous Goods Regulations 1992*;
- *Dangerous Goods Safety Act 2002*;
- *Environmental Protection Act 1986 (as amended)*;
- *Environmental Protection Regulations 1987*;
- *Environmental Protection (Noise) Regulations 1997*;
- *Environmental Protection (Controlled Waste) Regulations 2001*;
- *Environmental Protection Act Amendment Act 2003*
- *Explosives and Dangerous Goods Act 1961*²;
- *Health Act and Regulations 1911*;
- *Land Administration (Amendments) Act 1997*;
- *Local Government Act 1995*;
- *Mining Act 1978 (as amended)*;
- *Occupational Safety and Health Act 1984*;

¹ The Contaminated Sites Act 2004 is currently under amendment, scheduled to be finalised early 2005.

² The Dangerous Goods and Explosives legislation is currently under review and is expected to be replaced by the new legislation shortly.

- *Rail Safety Act 1998*
- *Rail Freight System Act 2000*
- *Rights in Water and Irrigation Act 1915 (as amended);*
- *Soil and Land Conservation Act 1945;*
- *Waterways Conservation Act 1976;*
- *Water Supply Sewage and Drainage Act 1912;* and
- *Wildlife Conservation Act 1950 (as amended).*

The five-year plan for mining in ML1sa takes into account legislation and policies relevant to the abstraction of bauxite, such as the *Western Australian Wildlife Conservation Act 1950*, *Conservation and Land Management Act 1984* and the *Soil and Land Conservation Act 1945*.

3.4 COMMONWEALTH GOVERNMENT LEGISLATION

Under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act), an action requires approval from the Federal Environment Minister if the action has, will have, or is likely to have, a significant impact on a matter of national environmental significance such as:

- World Heritage properties;
- Ramsar wetlands of international importance;
- Listed threatened species and communities;
- Migratory species protected under international agreements;
- Nuclear actions; and
- Commonwealth marine environment.

The Proposal is not considered to trigger the EPBC Act. The agreed mine planning process has not changed and the mining lease is part of prior environmental approvals.

The National Pollutant Inventory (NPI) is a collaborative initiative of the Commonwealth, State and Territory Governments and requires industries across Australia to report emissions data and other details of reportable substances for posting on the Internet for public review. Wagerup refinery is required to report to the NPI on an annual basis, with the first submission of data occurring in October 1999.

Other agreements and treaties that may affect the Proposal are:

- Montreal Protocol on Substances that Deplete Ozone;
- United Nations Framework Convention on Climate Change;
- National Greenhouse Response Strategy;
- National Strategy for Ecologically Sustainable Development;

- “Hope for the Future” - The Western Australian State Sustainability Strategy; and
- Greenhouse Strategy for Western Australia.

Alcoa is a voluntary signatory to the following agreements:

Australian Minerals Industry Code for Environmental Management

Alcoa became a signatory to the Australian Minerals Industry Code for Environmental Management in 1998. Signatories are required to comply with nine key principles, which incorporate public reporting on the implementation of the Code and environmental performance to government bodies, community and within the Company.

Greenhouse Challenge Agreement (via Aluminium Development Council)

Alcoa became a signatory to the Greenhouse Challenge through the Australian Aluminium Council. Alcoa is required to report on greenhouse gas emissions generated and greenhouse sinks created each year. Formal agreement to this program has expired, but Alcoa is continuing to report on greenhouse emissions in accordance with previous commitments.

3.5 KEY DECISION MAKING AUTHORITIES

The key Decision Making Authorities (DMAs) involved in the environmental assessment of the Proposal are the Environmental Protection Authority and the Department of Environment (DoE), which provides advice to the EPA.

Other DMAs involved in the Proposal approvals include the:

- Department of Industry and Resources (DoIR);
- Department of Health;
- Department of Land Information (DLI);
- Department of Planning and Infrastructure (DPI);
- Department of Conservation and Land Management (CALM);
- Water Corporation;
- Harvey Water;
- Shire of Waroona; and
- Shire of Harvey.

3.6 APPROVALS PROCESS

The EPA determined that the Proposal required a formal level of environmental assessment, subsequently set by the Minister for Environment as an ERMP. The process for submission and assessment of an ERMP is outlined below:

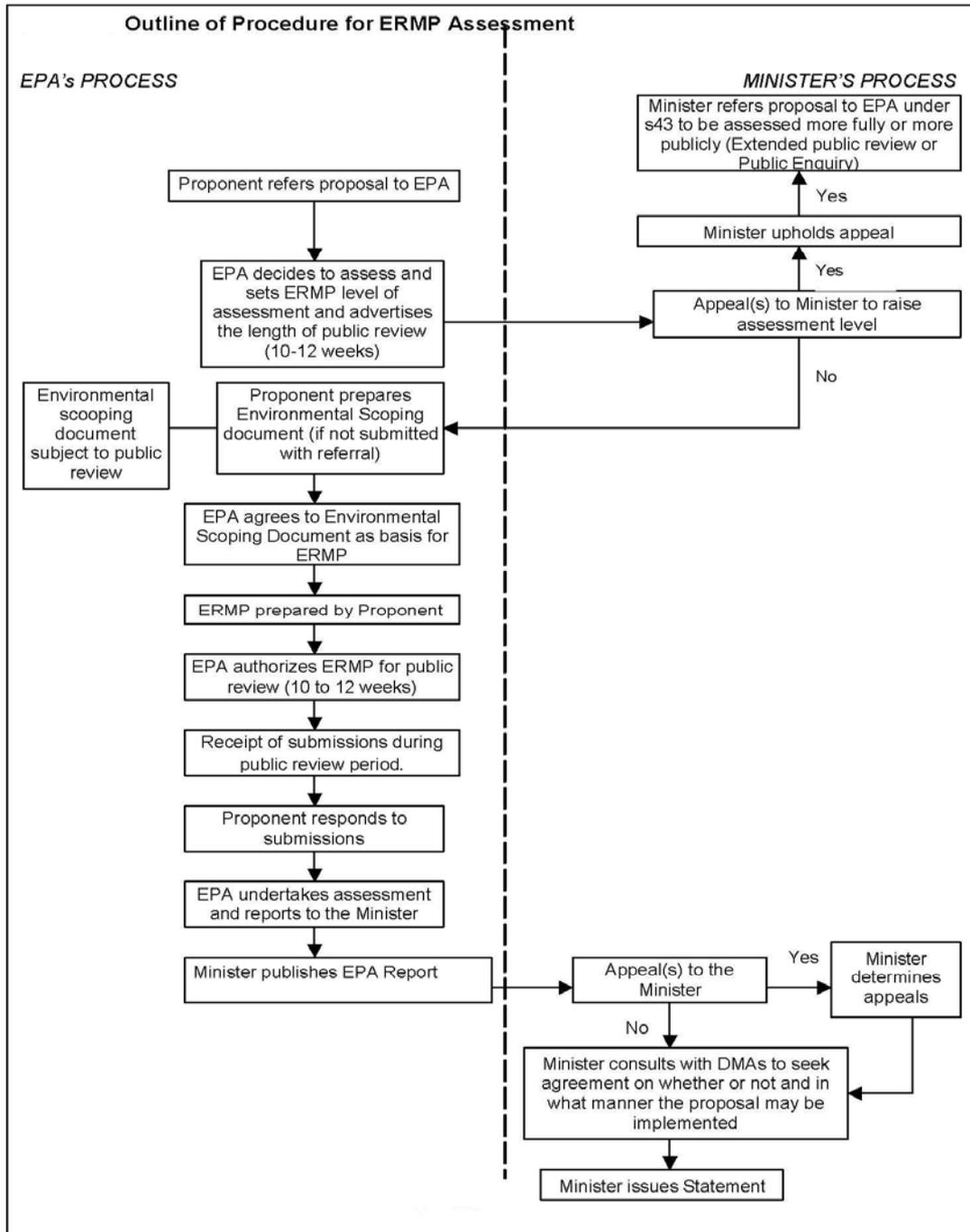
1. The Proponent refers the proposal to the EPA to set the level of assessment;
2. The EPA determines the level of assessment as an ERMP and advertises this decision and the length of the public review period, subject to appeal;
3. The Proponent prepares an Environmental Scoping Document outlining the scope of works for the ERMP assessment;
4. The Scoping document is released for a two week public comment period;
5. The EPA agrees to the Environmental Scoping Document as a basis for the ERMP;
6. A draft ERMP is prepared by the Proponent and submitted to the EPA Service Unit for comment;
7. The final draft of the ERMP (this document) is submitted to the EPA for authorisation to release as a public document;
8. The ERMP is released for public review period of 10 weeks;
9. Any submissions received by the EPA at the end of the review period are provided to the Proponent, for the Proponent to summarise and respond;
10. The EPA undertakes an assessment of the proposal;
11. The EPA 'Report and Recommendations' is published;
12. A two week statutory appeal period commences;
13. The Minister determines any appeals on the EPA's Report and Recommendations, and consults with the key Decision Making Authorities to seek agreement on whether or not, and in what manner the proposal may be implemented;
14. The Minister issues a Statement (provided approval for the Proposal is given).

The ERMP submission and assessment process is also shown as a flow chart in Figure 5 below.

The EPA set the public review period for the ERMP at 10 weeks. In this ten week period, the public can review the potential environmental impacts of the Proposal and the proposed management measures. The public may make submissions in support of the Proposal or to raise concerns with the identified impacts and management of the environmental factors. Guidelines for making a submission are presented in the front of this document.

If approval for the Proposal is obtained under Part IV of the *Environmental Protection Act 1986*, licensing of construction and operations is required under Part V of the Act. This requires a Works Approval Application to be submitted to the DoE prior to commencement of construction.

Figure 5: ERMP Assessment Process



Source: *Environmental Protection Act 1986: Environmental Impact Assessment (Part IV Division 1) Administrative Procedures 2002.*