



Environmental Protection Authority

Guidance for the Assessment of Environmental Factors

(in accordance with the
Environmental Protection
Act 1986)

Prevention of air quality impacts from land development sites

No. 18

Final

March 2000

Western Australia

FOREWORD

The Environmental Protection Authority (EPA) is an independent statutory authority and is the key provider of independent environmental advice to Government.

The EPA's objectives are to protect the environment and to prevent, control and abate pollution. The EPA aims to achieve some of this through the development of environmental protection Guidance Statements for the environmental impact assessment (EIA) of proposals.

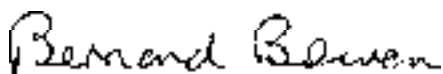
This document is one in a series being issued by the EPA to assist proponents, consultants and the public generally to gain additional information about the EPA's thinking in relation to aspects of the EIA process. The series provides the basis for EPA's evaluation of, and advice on, development proposals subject to EIA. The Guidance Statements are a part of assisting proponents in achieving an environmentally acceptable proposal. Consistent with the notion of continuous environmental improvement and adaptive environmental management, the EPA expects proponents to take all reasonable and practicable measures to protect the environment and to use this Guidance as representing the minimum necessary required to achieve an appropriate level of environmental protection.

This document provides guidance on the control of dust and smoke from land development sites.

The guidance and its application, presented in sections 3 and 4 of the document respectively, will be used by the EPA to prevent air quality impacts due to dust and smoke from land development sites.

This Guidance Statement has the status of "**Final**" which means it has been reviewed by stakeholders and the public and has undergone a 12 month test period. The EPA has signed off the Guidance Statement and published it although it will be updated regularly as new information comes to hand.

I am pleased to release this document which now supercedes all previous versions.



Bernard Bowen
CHAIRMAN
ENVIRONMENTAL PROTECTION AUTHORITY

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Final Guidance Statement No. 18

Prevention of air quality impacts from land development sites

Key Words: Land development site, air quality, burning, smoke, dust, vegetation

1. PURPOSE

1.1 Guidance Statements generally are developed by the EPA to provide advice to proponents, and the public generally, about the minimum requirements for environmental management which the EPA would expect to be met when the Authority considers a proposal during the assessment process.

This Guidance Statement is termed Final, and thus the EPA expects that proponents will give full attention to the information provided when they submit proposals for assessment.

1.2 This Guidance Statement specifically addresses the prevention of impacts on air quality from dust and smoke generated on land development sites. The Guidance provides information which the EPA will consider when assessing proposals where dust and smoke from land clearing are relevant environmental factors in an assessment. It takes into account:

- (a) protection of the environment as defined by the *Environmental Protection Act 1986 (WA)* with a focus on air quality impacts;
- (b) the factor of 'air quality impacts (dust and smoke) from land development sites' as a significant localised and regional environmental pressure in Western Australia as identified through:
 - the Perth Haze Study;
 - community concerns and complaints; and
 - the Select Committee on Recycling and Waste Management.

1.3 This is a Guidance Statement and proponents are encouraged to consider their proposals in the light of the guidance given. A proponent who wishes to deviate from the minimum level of performance set out in this Guidance Statement would be expected to put a well researched and clear justification to the EPA arguing the need for that deviation.

2. THE ISSUE

Land development sites can generate wind-borne dust, especially during summer, as well as smoke from burning cleared vegetation, generally during winter.

The number of land development sites causing reduced amenity to local residents and contributing to a reduction in regional air quality, has lead to the factor becoming a major community issue. Accordingly, the EPA takes into account the importance of prevention of air quality impacts from land developments during the EIA process for such proposals.

3. THE GUIDANCE

3.1 Application of the Guidance to Assessment

When assessing proposals with the potential to create dust and smoke, the EPA will apply the following guidelines during the assessment of any new proposal:

- Cleared areas on land development sites must be stabilised following vegetation clearance
- The burning of cleared vegetation on land development sites greater than 2000 sqm will be banned by new regulations under the Environmental Protection Act in mid 2000

3.2 Approaches for Achieving Desired Outcomes

3.2.1 Potential measures for controlling dust and smoke

To control dust proponents should retain as much vegetation as possible; patches and strips can be very effective as wind breaks.

Proponents must stabilise exposed soil where large areas of vegetation are disturbed. A combination of the following techniques is likely to be most effective:

- (i) wind fencing;
- (ii) water to damp down areas;
- (iii) hydromulch;
- (iv) chemical stabilisation; and
- (v) chipped vegetation.

Proponents must not burn cleared vegetation after the introduction of the Environmental Protection Amendment Regulations prohibiting burning on land development sites greater than 2000 square metres, and should avoid doing so before that date. Other alternatives, in order of preference are:

- (i) permanently retain as much standing vegetation as possible;
- (ii) transplant valuable species from areas to be cleared to (e.g.) public open space;
- (iii) cut and stack timber for firewood sale or collection, subject to the limitations under the Environmental Protection (Fire Wood Supply) Regulations 1998;
- (iv) chip cleared vegetation and use as mulch for soil stabilisation;
- (v) plough in low scrub to incorporate into topsoil to be separately stripped, stockpiled and respread; and
- (vi) dispose of vegetation to landfill only where the above options are not feasible.

3.2.2 Management system

Where appropriate, the proponent should demonstrate that there is in place an environmental management system which includes the following elements:

1. an environmental policy and corporate commitment to it;

2. mechanisms and processes to ensure:
 - 2.1 planning to meet environmental requirements;
 - 2.2 implementation and operation of actions to meet environmental requirements;
 - 2.3 measurement and evaluation of environmental performance; and
3. review and improvement of environmental outcomes.

4. APPLICATION

4.1 Area

This policy applies to all new land development sites greater than 2000 sqm in Western Australia.

4.2 Duration and Review

The duration of this policy is for five years unless some unforeseen circumstance requires it to be revised earlier.

5. RESPONSIBILITIES

5.1 Environmental Protection Authority Responsibilities

The EPA will apply this Guidance Statement in making decisions about whether or not to assess land development proposals and in any assessment of such proposals.

5.2 Department of Environmental Protection Responsibilities

The DEP will assist the EPA in applying this Guidance Statement in environmental impact assessment and in conducting its functions under Part V of the *Environmental Protection Act 1986*.

5.3 Proponent Responsibilities

Where proponents demonstrate to the EPA that the requirements of this Guidance Statement are accountably and enforceably incorporated into proposals, the assessment of such proposals is likely to be assisted.

6. DEFINITIONS

land development sites—are sites larger than 2000m² on which the clearing of vegetation and/or topsoil, recontouring (bulk earthworks), trenching and/or road construction is undertaken to develop the land for any use.

7. LIMITATIONS

This Guidance Statement has been prepared by the Environmental Protection Authority to assist proponents and the public. While it represents the contemporary views of the Environmental Protection Authority, each proposal which comes before the Environmental Protection Authority for environmental impact assessment will be judged on its merits. Proponents who wish to deviate from the Guidance provided in this document should provide robust justification for the proposed departure.

8. REFERENCES

Government of Western Australia. 1987. Environmental Protection Regulations. State Law Publishers, Perth.

Government of Western Australia. 1998. Environmental Protection (Fire Wood Supply) Regulations. State Law Publishers, Perth.

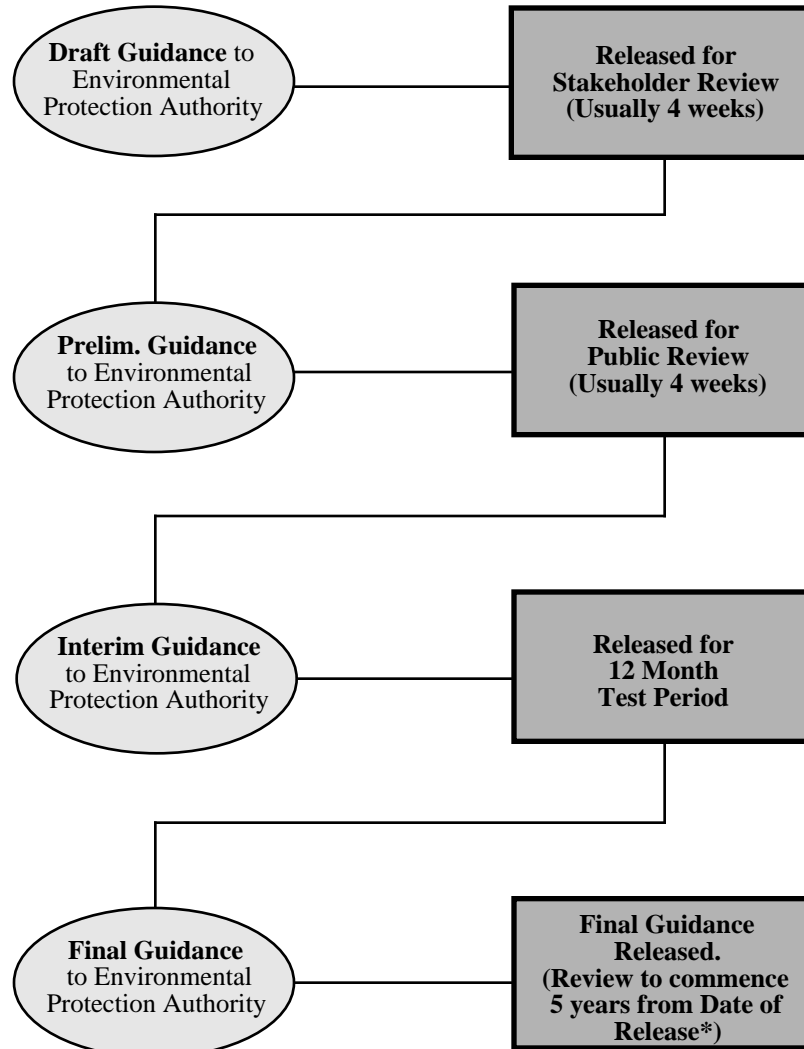
Government of Western Australia. 1998. The West Australian Government's Response to the Report of the Select Committee on Perth's Air Quality. Perth.

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Contact Officer	Ken Raine, (08) 9222 7112 e-mail: ken_raine@environ.wa.gov.au

Appendix 1

Generic Flow Diagram for the Guidance Statement Process

(Note: Guidance Statements will usually progress through the stages shown below. The number of stages required for each Guidance Statement will be determined by the EPA on a case by case basis. The EPA will take stakeholder and public views into account when making this decision.)



* Guidance may be reviewed earlier if circumstances require it.

Note: Shaded areas denotes those parts of the process completed