Pine Rivers Shire Council

Planning Scheme Policy

PSP14 Hazard and Risk Assessment



Planning Scheme Policy for Pine Rivers Shire

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ADOPTION

Pine Rivers Shire Council adopted this planning scheme policy on 19 June 2006.

COMMENCEMENT

This planning scheme policy took effect from 15 December 2006.

I, Ray Burton, Chief Executive Officer, of the Pine Rivers Shire Council, hereby certify that this document is a true copy of the original.

Ray Burton

Chief Executive Officer



PSP14 - HAZARD AND RISK ASSESSMENT

HEAD OF POWER

This policy is a document that supports the planning scheme for the Shire and has been made by Council using the process prescribed in Chapter 2, Part 1, Division 5 of the *Integrated Planning Act 1997*.

OBJECTIVE

The objectives of this planning scheme policy are to provide guidance on:-

- 1. what issues should be examined when preparing either a "risk assessment report" or an "air quality assessment report" for development to which this policy applies; and
- what basic details need to be provided as part of any development application to which this policy applies.

DEFINITIONS/APPLICATION

Application

This Policy applies to all development which is:-

- 1. assessable against an applicable code¹ that specifically references this policy; or
- specifically identified as applicable in an information request made under the IDAS provisions of the Integrated Planning Act 1997.

Definitions

Hazard – a thing or a situation with the potential to cause harm or unreasonable nuisance to people, or damage to property or the environment

Hazard Facility – a place where hazardous material is or is proposed to be stored, conveyed, manufactured, processed, used, treated, dispensed, sold, disposed of or rendered harmless.

Hazardous Incident – an event which causes or has the potential to cause harm or unreasonable nuisance to people, or damage to property or the environment.

Hazardous Material – a substance with potential to cause harm or unreasonable nuisance to people, or damage to property or the environment because of one or more of the following:-

- 1. the chemical properties of the substance;
- 2. the physical properties of the substance; and
- 3. the biological properties of the substance.

HIPAP – the Hazardous Industry Planning Advisory Papers prepared by the New South Wales Department of Planning and Urban Affairs.

Major Hazard Facility – this term has the meaning given in the *Dangerous Goods Safety Management Act* 2001.

Minor Hazard Facility – a hazard facility with no potential for off-site impact resulting from a hazardous incident on the land.

Moderate Hazard Facility – a hazard facility, other than a major hazard facility, which, when subjected to a hazardous incident, has the potential to produce adverse off-site impacts.

Risk – the likelihood of harm to a person or damage to a property or the environment arising from a hazard.

¹ This policy is specifically referenced in the Industrial Buffer Overlay Code and the Infrastructure Facilities Buffers Overlay Code.



POLICY STATEMENT

Every application for development to which this policy applies is to incorporate a hazard and risk assessment demonstrating that:-

- 1. for development within an "Industrial Buffer" shown on Overlay Code Map 5.12 the proposed development will not be subject to those particular issues identified in PS1 and PS2 in Table 5.12.3 of the Industrial Buffer Overlay Code; or
- 2. for development within a buffer or control zone shown on Overlay Code Map 5.14 the proposed development will not be subject to those applicable issues identified in PS 1.1, PS 2 and PS 3.1 in Table 5.14.3 of the Infrastructure Facilities Buffers Overlay Code; or
- 3. for other development to which this policy applies the proposed development will not be subject to those particular issues specifically identified in an information request made under the IDAS provisions of the *Integrated Planning Act 1997*.

Where such an assessment is not provided as part of the initial documentation for the application, it would ordinarily be the subject of an information request under the IDAS provisions of the *Integrated Planning Act* 1997.

Hazard and Risk Assessment

The hazard and risk assessment is to consider the proposed development in the context of its proximity to existing or potential hazard facilities, and the safety management controls to be incorporated in the proposed development to mitigate the adverse affects of any hazardous incident emanating from those hazard facilities. The major issues to be addressed in any hazard and risk assessment are:-

- 1. hazard identification a systematic method used to identify potential events that could cause harm to users of the proposed development or damage to any part of the development;
- 2. consequence analysis predictions of the characteristics (such as size, duration and intensity) of the potential incidents and their physical affects on the proposed development;
- 3. frequency analysis the likelihood of a hazardous event having an adverse affect on the proposed development occurring and the likely frequency of such occurrences;
- 4. risk analysis an assessment of the consequence and frequency analysis to determine anticipated risk levels; and
- 5. risk assessment comparison of risk levels with the acceptable risk criteria for the type and size of development proposed to enable informed decision on the application to be made. (Information on acceptable risk criteria can be found in HIPAP No.4 "Risk Criteria for Land Use Safety Planning").

Every hazard and risk assessment must incorporate a preliminary hazard analysis (PHA). Where the PHA establishes that the adjacent hazard facilities will not have any potential adverse affect on the proposed development, it may not be necessary to continue with the remaining components of the assessment for purposes of deciding the development application. However, where the PHA indicates that adverse impacts may occur, the remaining components of the hazard and risk assessment will need to be conducted. It is important to note that when assessing the effects of hazard facilities, the assessment needs to consider the risk levels at the receptor site from all sources. Accordingly, it is not possible to assess the risk from one facility in isolation. It is the cumulative affect of all hazard facilities in the area which must be assessed.

Preliminary Hazard Assessment of Hazard Facilities

Those issues which must be addressed in a PHA of a hazard facility involve:-

- 1. the identification of the types and quantities of all dangerous goods used or stored on the premises;
- 2. a description of the storage/processing activities that will involve these materials; and
- 3. the identification of accident scenarios and hazardous incidents that could occur.

Using the information obtained from this PHA, the development proponent would undertake a simplified consequence analysis. Where this simplified analysis indicates that the hazard facility could generate off-site impacts; i.e., either a moderate hazard facility or a major hazard facility is being examined; a quantitive PHA



would be required. The results of such a quantitive analysis would then need to be used to produce a quantified risk assessment (QRA) which analyses and depicts the consequences of hazardous incidents, their frequencies and calculated risk contours. Depending upon the results of the QRA, further studies, including an examination of societal risks, may be required.

A PHA involving a quantified risk assessment should be prepared in accordance with HIPAP No.6 – "Guidelines for Hazard Analysis" and would need to demonstrate that the risk level falls within the acceptability limits set in HIPAP No.4 – "Risk Criteria for Land Use Safety Planning" for each of the applicable risk criteria. If a different methodology is used, full justification, description and assumptions for that methodology should be stated.

REVIEW TRIGGERS

This policy is reviewed internally for applicability, continuing effect and consistency with planning scheme and other legislative provisions when any of the following occurs:-

- (1) the planning scheme is amended;
- (2) the planning scheme is replaced by a new planning scheme;
- (3) amendments which affect the allowable scope and effect of a planning scheme policy are made to the Integrated Planning Act 1997; and
- (4) other circumstances as determined from time to time by a resolution of Council.

RESPONSIBILITY

This policy is to be:-

- (1) implemented by the Manager, Development Services; and
- (2) reviewed and amended in accordance with the "Review Triggers" by the Manager, Strategic Direction in consultation with the Manager, Development Services.