## State code 21: Hazardous chemical facilities

**Table 21.2.1: Material change of use**

| Performance outcomes | Acceptable outcomes | Response |
| --- | --- | --- |
| **PO1** Any risk created by a hazardous chemical facility (including increasing an existing risk) is proportionate to the sensitivity of the surrounding land uses or zones. | **AO1.1** Any off-site impact from a hazard scenario shall not exceed, at the boundary of any vulnerable land use or zone:   1. a dangerous dose to human health; or 2. if the above criteria cannot be achieved:    1. an individual fatality risk level of 0.5 x 10-6/year    2. the societal risk criteria in figure 21.3.1.   AND | Complies with PO# / AO#  Use this column to indicate whether compliance is achieved with the relevant PO or AO (or if they do not apply), and explain why |
| **AO1.2** Any off-site impact from a hazard scenario shall not exceed, at the boundary of any sensitive land use or zone:   1. a dangerous dose to human health; or 2. if the above criteria cannot be achieved:    1. an individual fatality risk level of 1 x 10-6/year    2. the societal risk criteria in figure 21.3.1.   AND |  |
| **AO1.3** Any off-site impact from a hazard scenario shall not exceed, at the boundary of any commercial or community activity land use or zone:   1. a dangerous dose to human health; or 2. if the above criteria cannot be achieved:    1. an individual fatality risk level of 5 x 10-6/year    2. the societal risk criteria in figure 21.3.1.   AND |  |
| **AO1.4** Any off-site impact from a hazard scenario shall not exceed, at the boundary of any open space land use or zone:   1. a dangerous dose to human health; or 2. if the above criteria cannot be achieved:    1. an individual fatality risk level of 10 x 10-6/year    2. the societal risk criteria in figure 21.3.1.   AND |  |
| AO1.5 Any off-site impact from a hazard scenario shall not exceed, at the boundary of any industrial land use or zone:   1. a dangerous dose to the built environment; or 2. an individual fatality risk level of 50 x 10-6/year. |  |
| **PO2** The location and siting of a hazardous chemical facility considers and responds to any off-site effects from a hazard scenario at any existing hazardous chemical facility in the vicinity. | No acceptable outcome is prescribed. |  |
| **PO3** Storage and handling areas for fire risk hazardous chemicals are provided with control measures to identify a fire situation and trigger an emergency response. | **AO3.1** Storage and handling areas for fire risk hazardous chemicals are provided with a 24 hour monitored fire detection system that has the ability to detect a fire in its early stages and notify an emergency responder at all times. |  |
| **PO4** Storage and handling areas for liquid or solid fire risk hazardous chemicals are provided with a spill containment system which:   1. has a working volume capable of containing any reasonably foreseeable spill or leak within the boundaries of the development, including any resultant effluent generated in response to an emergency 2. ensures that any prescribed hazardous chemicals that, if in contact with each other, may react to produce a fire, explosion or other harmful reaction, or a flammable, toxic or corrosive vapour, are not brought together. | **AO4.1** Storage and handling areas for packages of liquid or solid fire risk hazardous chemicals are provided with a spill containment system with a working volume capable of containing a minimum of 100 per cent of all packages (prescribed hazardous chemicals and/or non-hazardous chemicals) within the area plus the output of any fixed firefighting system provided for the area over a minimum of 90 minutes.  AND |  |
| **AO4.2** Storage and handling areas for liquid or solid fire risk hazardous chemicals in tanks are provided with a spill containment system with a working volume capable of containing a minimum of:   1. 110 per cent of the largest tank within a spill compound or 25 per cent of the aggregate where multiple tanks are located within a spill compound, whichever is the greater 2. the output of any fixed firefighting system provided for any bulk tank within a spill compound over a minimum of 90 minutes.   AND |  |
| **AO4.3** The hazardous chemical facility does not store or handle any prescribed hazardous chemicals that, if in contact with each other, may react to produce a fire, explosion or other harmful reaction, or a flammable, toxic or corrosive vapour. |  |
| **PO5** The hazardous chemical facility is located and/or designed to minimise any adverse consequence of:   1. flood 2. bushfire 3. erosion or storm tide inundation 4. landslide   on a storage and handling area. | **AO5.1** Storage and handling areas are located outside of:   1. a flood hazard area 2. a bushfire prone area 3. an erosion prone area or storm tide inundation area 4. a landslide hazard area. |  |
| **PO6** The hazardous chemical facility is located and/or designed to minimise any adverse consequence of a natural hazard such as an earthquake or wind action on a storage and handling area. | No acceptable outcome is prescribed. |  |