# **State code 21: Hazardous chemical facilities**

[Planning guideline – State code 21: Hazardous chemical facilities provides direction on how to address this code.](https://www.worksafe.qld.gov.au/safety-and-prevention/hazards/hazardous-chemicals/managing-hazchem-risks/land-use-safety-planning)

**Table 21.1: Material change of use**

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| **Performance outcomes** | **Response** |
| **Off-site impacts—vulnerable land use or land zoned for a vulnerable land use** |
| **PO1** The **hazardous chemical facility** does not create a **dangerous dose to human health**. | Complies with PO# Use this column to indicate whether compliance is achieved with the relevant PO (or if they do not apply), and explain why |
| **Off-site impacts—sensitive land use or land zoned for a sensitive land use** |
| **PO2** The **hazardous chemical facility** does not create a **dangerous dose to human health**.  |  |
| **Off-site impacts—commercial or community activity land use or land zoned for a commercial or community activity land use** |
| **PO3** The **hazardous chemical facility** does not create a **dangerous dose to human health**. |  |
| **Off-site impacts—open space land use or land zoned for an open space land use** |
| **PO4** The **hazardous chemical facility**, does not create:1. a **dangerous dose to human health**; or
2. where (a) cannot be achieved, an **individual fatality risk level** of 10 x 10-6/year and the societal risk criteria in figure 21.1.
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| **Off-site impacts—industrial land use or land zoned for an industrial land use** |
| **PO5** The **hazardous chemical facility**, does not create either of the following:1. a **dangerous dose to the built environment**; and
2. an **individual fatality risk level** of 50 x 10-6/year.
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| **Storage and handling areas** |
| **PO6 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. |  |
| **PO7 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 percent 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. |  |
| **PO8** **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 percent of the largest **tank** within a spill compound or 25 percent of the aggregate where multiple **tanks** are located within a spill compound, whichever is the greater; and
2. the output of any **fixed firefighting system** provided for any bulk **tank** within a spill compound over a minimum of 90 minutes.
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| **PO9** **Storage and handling areas** for **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 designed to prevent contact between the **prescribed hazardous chemicals**. |  |
| **PO10** Development isdesigned and sited to mitigate impacts on **storage and handling areas** from **natural hazard** including, but not limited to:1. flood;
2. bushfire;
3. erosion;
4. storm tide inundation;
5. landslide;
6. earthquake;
7. **wind action**.
 |  |
| **All development** |
| **PO11** Developmentis designed and sited to mitigate the risks from **hazard scenarios** occurring at existing **hazardous chemical facilities**. |  |