

**Chapter 6:
Linking the HFSP with the
District Plan**

6 Linking the HFSP with the District Plan

Key Points

- The Consent Status Matrix is the main link between a district plan and the Hazardous Facilities Screening Procedure (HFSP). It contains a series of numerical values called Consent Status Indices that are assigned to each land use zone in the Consent Status Matrix.
- Quantity Ratios calculated by the HFSP are compared against these indices to determine whether a proposed hazardous facility is a permitted activity or whether it requires a resource consent.
- This section provides guidance on how to develop a Consent Status Matrix and the approach taken in assigning and calibrating Consent Status Indices.
- Interfaces between incompatible land uses are addressed, together with available measures to manage these.

6.1 The Consent Status Matrix

The Consent Status Matrix is the main link between a district plan and the HFSP. It contains a series of Consent Status Indices for each land use zone of the district. These are both district and zone-specific and reflect the level of risk which is considered appropriate and acceptable for different land use zones. The Consent Status Matrix enables the consent authority to determine the appropriate level of scrutiny for each land use consent application in its respective location.

The main purpose of the Consent Status Matrix is to screen out those activities which require further assessment to separate them from those which can proceed as permitted activities. It is not used to determine the outcome of a resource consent application for a proposed facility. This will be decided only after an additional assessment and a review of environmental effects and risks have been undertaken.

6.2 Consent Status Indices

Consent Status Indices are the numerical values assigned to each land use zone in the Consent Status Matrix. They are the values against which the Quantity Ratios (Q) calculated with the HFSP are compared to determine whether a proposed hazardous facility is permitted or whether it requires a resource consent. Effectively, where the Quantity Ratio exceeds a Consent Status Index for a particular land use zone, a resource consent is required.

The HFSP has been calibrated for assessing potential off-site effects in a heavy industrial zone. Therefore, the Consent Status Index for this zone acts as a benchmark and has been set at a numerical value of 1. All Consent Status Indices for other land use zones are set in relative terms to the established benchmark of a heavy industrial zone.

Thus, for an application for a hazardous facility in a heavy industrial zone:

- if the calculated Quantity Ratios of the facility are less than 1 in each Effect Type, the activity is permitted because the potential off-site effects are deemed to be acceptable, provided the operator complies with the minimum performance standards specified in the district plan

- if the calculated Quantity Ratios of the facility exceed 1 in any one of the Effect Types, the application requires a consent to determine the significance of potential off-site effects.

For more sensitive land use zones such as residential areas, the Consent Status Index is set proportionately lower, so that a resource consent will be required at a lower level of potential off-site effects. Table 6 gives an example of a Consent Status Matrix showing hypothetical Consent Status Indices for industrial, business and residential zones.

Table 6: Example of a consent status matrix

Zone	Consent status indices for permitted activities	Consent status indices for activities requiring a consent
Industrial	≤1	>1
Business	≤0.2	>0.2
Residential	≤0.02	>0.02

Where Consent Status Indices indicate that a proposed hazardous facility requires a consent, it may be possible to review the proposed development to reduce cumulative potential effects to within permitted levels. This may be achieved by:

- reducing the number and quantity of substances used/stored
- replacing highly hazardous substances with less hazardous alternatives
- relocating the proposed facility to a more suitable land use zone
- carrying out the HFSP for individual sub-facilities on the site, subject to sub-facilities being separated more than 30 metres from each other.

6.3 How to develop a Consent Status Matrix

Each TA needs to develop its own Consent Status Matrix. This process takes into account the quality and sensitivity of the existing environment, land use zones and typical activities in the district to ensure that the levels of risk presented by hazardous substances are appropriate to the characteristics of the district. The factors considered in this process are further discussed below.

6.3.1 Land use strategy

When developing a Consent Status Matrix, district councils need to consider a range of factors as they relate to the council's planning and land use strategy and the characteristics of the district. The Consent Status Matrix must provide for each of the land use or zoning types that a council intends to use within its district plan. Consent Status Indices should be calibrated on the basis of the anticipated effects of activities and the particular environmental sensitivity of each area. If a typical heavy industrial zone has a Consent Status Index of 1, increasingly sensitive areas must have proportionally lower indices.

6.3.2 Interface issues

Occasionally, historical land use zoning practices result in industrial or business zones being inadequately separated from adjoining sensitive land uses such as residential areas. Further, modern land use planning practices increasingly allow mixed activities to take place within the same land use zone to maximise the effectiveness of the use of land. In some instances, additional controls may need to be applied to protect more sensitive adjoining land uses. Options for dealing with interface issues are further discussed in Section 6.5.

6.3.3 Natural hazards

Some districts and regions are particularly prone to natural hazards. While the HFSP itself cannot account for such additional risks, this may be reflected by lower Consent Status Indices in land use zones prone to natural hazards or by developing appropriate minimum performance standards.

6.3.4 Transport of hazardous substances

There is a range of laws and regulations that deal with the transport of hazardous substances (refer Sections 2.4.7 and 3.2.3). The HFSP itself is not suitable to address the transport of hazardous substances, as hazardous substances in transit are a 'shifting target' and move between land use zones. No account can therefore be taken of hazardous substances transport in a Consent Status Matrix.

However, stationary vehicles loaded with hazardous substances that are parked on a site for more than one hour are generally considered to constitute a fixed hazard and have to comply with relevant Consent Status Indices for the particular land use zone the activity is located in.

6.3.5 Community aspirations

Different communities may be willing to accept different levels of risk – either higher or lower – depending on the perceived benefits associated with the proposed activity. This can be reflected in the magnitude of Consent Status Indices. However, in setting higher acceptable levels, a TA must consider its ability to effectively enforce its district plan provisions and other statutes relevant for the management of hazardous substances effectively.

6.3.6 Number of potential applications

Where a TA expects applications for a large number of small to medium scale proposed hazardous facilities, it may consider the inclusion of an intermediary consent status category in the Consent Status Matrix (for example, controlled or restricted discretionary).

An intermediary resource consent status category is applied to proposed hazardous facilities where these are small to medium-scale and only just exceed Consent Status Indices for permitted activities. This would reduce the level of scrutiny for small to medium-scale facilities as well as the expense for an applicant to obtain a consent. It would still assist a TA in monitoring and the keeping of records of the locations of these facilities.

A controlled activity status indicates that approval for the activity shall be given, provided that relevant matters of control, as well as the standards and terms specified in the plan can be met. This gives applicants more certainty about the likely outcome of a resource consent application.

A restricted discretionary activity status indicates that approval may be given, provided that matters identified in a plan over which a TA has exercised its discretion are being appropriately addressed.

Where one of these options is taken, TAs will need to give careful consideration to the matters it wishes to control or exert discretion over, and how these matters will be reflected in resource consent conditions. Although this approach gives no or only limited opportunity to decline an application for a hazardous facility, it assists TAs in retaining limited control and carrying out their monitoring function by providing information about the nature and location of the facility or activity.

6.4 How to calibrate a Consent Status Matrix

Usually, a Consent Status Matrix is calibrated using the benchmark approach outlined in Section 6.2. However, in some cases, Consent Status Indices may need to be calibrated on a case-by-case basis. This is done to ensure that they meet the objectives of a particular land use zone and that small to medium-scale activities will in fact be permitted activities in appropriate land use zones.

In such circumstances, it is appropriate to carry out a range of surveys of hazardous facilities that fall into the predominant activity class of the land use zone in question. Hazardous substance data for similar hazardous facilities are then averaged and submitted to the HFSP. The calculated Quantity Ratios are then used to derive appropriate Consent Status Indices.

6.4.1 Examples of different Consent Status Matrix tables

To assist councils in developing a Consent Status Matrix that suits the special needs of their community and the characteristics of the local environments, the following general examples are provided:

- provincial service town – example of basic Consent Status Matrix
- small service town surrounded by mixed rural land uses – example of calibrating the Consent Status Index for rural land use zones
- metropolitan centre – example of using an intermediary consent status category.

6.4.2 A provincial service town

This Consent Status Matrix applies to an average provincial service town of approximately 20,000–40,000 people, with limited rural land and typical residential and commercial zoning. The industrial zoning is categorised into a Light Industrial and an Industrial Zone.

The latter zone is designed to accommodate sites with large processing facilities, including a large dairy factory and timber processing plant. The former zone generally surrounds the small urban centres and residential areas in the district. It therefore enables the development of small to medium-scale industries servicing the large industries, the business sector and limited rural activities in the district.

The council does not expect or want to plan for any further significant industrial development. For this reason, the Consent Status Indices are set to permit most small to medium-size facilities in the Light Industrial Zone.

Table 7: Example of a consent status matrix for a provincial service town

Zone	Consent status indices for permitted activities	Consent status indices for discretionary activities
Industrial	≤1	>1
Light industrial	≤0.5	>0.5
Commercial	≤0.2	>0.2
Open space	≤0.1	>0.1
Residential	≤0.02	>0.02

6.4.3 A small service town surrounded by mixed rural land uses

Land uses in this town are categorised into five zones:

- Residential
- Commercial
- Industrial
- Rural 1
- Rural 2.

There is very little industrial development in the district at present. The council wishes to discourage any industry using or storing large amounts of hazardous substances from locating in the town in the future, reflecting community concerns. For this reason, the Consent Status Index for discretionary activities in the Industrial Zone is set at >0.5, indicating that most medium-size and large facilities would have to apply for a consent.

The council also wishes to restrict the use and storage of hazardous substances in the business centre of the town and has set the trigger level for the Commercial Zone at 0.1. This level will permit businesses with an incidental use of hazardous substances, but would require businesses that use hazardous substances as part of their day-to-day operation to apply for a consent.

Of the two rural zones, Rural 1 covers the greatest part of the district. Traditionally, this zone comprises large cattle and dairy farms which have a range of requirements for hazardous substances, such as animal remedies, sanitisers and disinfectants, fertilisers, pesticides, etc. A hazardous substances survey of the Rural 1 zone has indicated that to sustain normal farming activities as permitted activities in this zone, a Consent Status Index of approximately 0.75 is required.

The Rural 2 zone comprises mainly market gardening and horticultural activities on lifestyle blocks in the vicinity of town. The Council expects significant storage of agricultural sprays in this zone. A hazardous substance survey of the activities indicates that to enable most market gardening and horticultural activities to proceed as permitted activities, a Consent Status Index of 0.5 is required.

Based on the hazardous substance surveys of the two rural zones, the council now understands that farming and related activities are major users of hazardous substances, which will be accommodated by Quantity Ratios of between 0.5 and 0.75, thus enabling average farming activities to proceed as permitted activities. However, the council also wants to embark on a long term education and monitoring strategy to help farmers develop better knowledge about the management of hazardous substances, with a view to lowering these Quantity Ratios in the long term.

Table 8: Example of a consent status matrix for a small town

Zone	Consent status indices for permitted activities	Consent status indices for discretionary activities
Industrial	≤0.5	>0.5
Commercial	≤0.1	>0.1
Residential	≤0.02	>0.02
Rural 1	≤0.75	>0.75
Rural 2	≤0.5	>0.5

6.4.4 A metropolitan centre

This is a metropolitan area with a population of more than 150,000 people. In this city, very large industries are anticipated, for example plastics manufacture, oil refineries etc. They have been provided for with a Heavy Industrial Zone which in turn is buffered by a surrounding Industrial Zone. A third category of industrial zoning, the Light Industrial Zone, includes a variety of commercial and small industrial facilities.

A Special Purpose Zone is used to provide for activities ranging from hospitals to schools (which store and use hazardous substances), while the Business Zone represents the commercial centres of the city. Open Space zoning is used for parks, playing fields and other recreational facilities.

As the city expects a large number of applications for hazardous facilities each year, a 'controlled activities' category has been introduced into the Consent Status Matrix. This enables the council to impose certain conditions on the facilities falling into this category as well as making provisions for monitoring, while the consent process is less rigorous than for a discretionary activity.

Table 9: Example of a consent status matrix for a metropolitan area with heavy industrial activity

Zone	Consent status indices for permitted activities	Consent status indices for controlled activities	Consent status indices for discretionary activities
Heavy industrial	<1	1–2	>2
Industrial	<0.75	0.75–1.5	>1.5
Light industrial	<0.5	0.5–1	>1
Special purpose	<0.3	0.3–0.6	>0.6
Business	<0.2	0.2–0.4	>0.4
Residential	≤0.02	–	>0.02
Open space	≤0.1	–	>0.1

6.5 Interfaces between incompatible land uses

Interface issues arise where incompatible activities are located next or close to each other. While district plans endeavour to address major interfaces through the zoning strategy, residual interface issues in terms of hazardous substances still need to be dealt with locally. The HFSP addresses interface issues in terms of the use and storage of hazardous substances in different ways, as outlined below.

6.5.1 Interfaces within the same land use zone

Interface issues may arise within a zone where mixed or multiple activities take place, and where facilities presenting differing levels of hazard propose to locate next to each other. The HFSP addresses these issues through the resource consent status of individual facilities. In other words, the applicant for a consent to operate a proposed hazardous facility needs to assess any significant effects of the proposed facility and risks on neighbouring facilities and demonstrate that these are appropriately mitigated. Where neighbouring facilities are permitted activities, the interface is considered to be insignificant as long as minimum performance standards are complied with.

6.5.2 Interfaces between hazardous facilities and sensitive environmental resources

The HFSP applies an Adjustment Factor of 0.3 to hazardous substance Base Quantities if a hazardous facility is located close to sensitive water resources, effectively reducing acceptable quantities by 70%. This Adjustment Factor is applied in the case of a specified distance from the facility to the water resource, as specified by the TA in the district plan (generally assigned between 30–100 metres). The nature and capacity of the stormwater system in the area may need to be taken into account in specifying an appropriate distance.

6.5.3 Interfaces between incompatible land use zones

In some districts, industrial or business zones may be located close to more sensitive land use zones, for example residential land use zones. In the application of the HFSP, buffer zones can be created between incompatible land use zones. The buffer zone is then placed along the inside boundary of the more hazardous land use zone. Within this buffer zone, a more conservative Consent Status Index is applied to hazardous facilities to ensure the adequate protection of the adjoining, more sensitive land use zone.

The location and extent of buffer zones need to be considered very carefully. Overall, the objective of the buffer zone is to provide protection for sensitive land uses if adjacent to more hazardous land use zones, while not unduly compromising activities in the more hazardous land use zones.

6.5.4 Interfaces between neighbouring districts

The HFSP is not able to deal with interface issues between district council boundaries. These issues can only be resolved through effective communication with other councils and a good understanding of the respective district plan controls for hazardous substances.