

Appendix (x) – Hazardous Facility Assessment : Step-by-Step Guide

Background

The hazardous substance quantity thresholds in Table 1 in Rule 19.3.5 are based on an established hazardous substance assessment method, the HFSP (Hazardous Facility Screening Procedure). When assessing a hazardous facility against the quantity limits contained in Table 1, all hazardous substances proposed to be used or stored on a site must be taken into account. To achieve this, the quantities of hazardous substances must be added up for every hazardous substance sub-class they fall into. Wherever a hazardous substance quantity threshold is exceeded, a resource consent will be required and an application must be submitted to the Council.

Step 1 Compile site hazardous substance inventory

To assess a hazardous facility against the quantity thresholds contained in Table 1, it is necessary to compile a full inventory of hazardous substances proposed to be used or stored on the site in question, and their maximum quantity expected to be held at any time on-site. The definition of a “hazardous substance” is contained in the Definitions section of the District Plan.

Step 2 Classify hazardous substances proposed to be used or stored

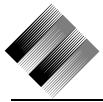
Every hazardous substance needs to be classified using the hazard classification system of the Hazardous Substances and New Organisms (HSNO) Act 1996. This classification should in most cases be included in the label of a container or accompanying Material Safety Data Sheet information. Additionally, the website of the New Zealand Environmental Risk Management Authority (ERMA New Zealand, www.ermanz.govt.nz) contains a hazardous substance register with associated classifications. Where no classification is available, this can be sought either from ERMA New Zealand or from the Council.

It is very important to note that most hazardous substances have more than one hazardous substance class --for example, petrol is a flammable liquid (Class 3.1A), a toxic substance (Class 6.1B) and an ecotoxic substance (Class 9.1B). Every hazardous substance must therefore be classified in terms of all hazard classes listed in Table 1.

Step 3 Add up hazardous substances for each hazardous substance sub-class

Once the hazardous substances have been classified under Step 2, their respective quantities¹ need to be added up within each hazardous substance sub-class.

¹ Adjustments to quantities are necessary where a substance is diluted with water or mixed with another substance. In this instance, only the percentage quantity of the hazardous substance or product in the dilution or mixture is assessed for the purposes of HFSP calculations (unless a mixture is more hazardous than its components, in which case data on the mixture need to be used). An exception to this are products or brands that already constitute dilutions or mixtures of hazardous substances and which have been classified in terms of their hazardous properties as the ‘whole’ dilution or mixture for life cycle management purposes. Examples of this are corrosives, oxidising substances and pesticides, which are often sold commercially as standard solutions or strengths. In these cases, quantity adjustments are only applied when these commercially supplied concentrations are further diluted or mixed.”



Step 4 Determine whether a hazardous substance quantity threshold has been exceeded

Once the respective quantities have been added up for the various hazardous substance sub-classes, they are compared with the respective hazardous substance thresholds for the applicable land use zone in Table 1.

Where any number in the column for the applicable activity environment is exceeded, the activity becomes a discretionary activity (except for those facilities specified in rule 19.3.2(c)) and a resource consent is required.

Step 5 What to do when a hazardous substance quantity threshold has been exceeded

Several options are available once it has been determined that a proposed hazardous facility exceeds hazardous substance quantity thresholds. In the first place, thought should be given to the possibility of using or storing lower quantities of hazardous substances or applying better inventory control. Often, some hazardous substances can also be replaced with less hazardous options. In some cases, submitting the proposed hazardous facility to the original HFSP may generate somewhat different results, depending on the given scenario. If this is deemed to be worthwhile, the Council should be approached for further information. Otherwise, a resource consent application following the assessment criteria for discretionary activities should be prepared and submitted to the Council.