

Appendix AQ11

criteria for assessing offensive or objectionable dust

AQ11.1 Nelson City Council, for the purposes of assessing compliance with permitted activity conditions, resource consent conditions, or sections 17(3)(a), 314(1)(a)(ii) or 322(1)(a)(ii) of the Resource Management Act will consider the following matters when determining whether or not a dust discharge has caused an objectionable or offensive effect:

- i) the **frequency** of dust nuisance events, and
- ii) the **intensity** of dust nuisance events, as indicated by dust quantity and the degree of nuisance, and
- iii) the **duration** of each dust nuisance event, and
- iv) the **offensiveness** of the discharge, having regard to the nature of the dust, and
- v) the **location** of the dust nuisance, having regard to the sensitivity (including reverse sensitivity) of the receiving environment.

AQ11.2 Assessment will be based on the combined impact (i) to (v) above, determined by some or all of the following sources. (It will not be necessary to consider all the listed matters in items (a) to (i) in every case).

- a) Other validated dust complaints or events relating to discharges from the same site, including previous validated complaints from one location.
- b) Collection of dust samples and analysis to identify source (where necessary and appropriate).
- c) Weather conditions at the time of the dust event, notably wind speed, wind direction and rainfall.
- d) Information regarding process conditions that may have caused the complaint. The effectiveness of dust control measures at the site will be taken into account.
- e) A complaints register held at the site. Nelson City Council may require the discharger to keep such a register and identify any cause of an alleged dust nuisance, including remedial action taken.
- f) Dust monitoring both within and beyond the site boundary. This includes both deposited dust and suspended particulate monitoring. Regard will be had to the Ministry for the Environment's *Good Practice Guide for Assessing and Managing the Environmental Effects of Dust Emissions* (January, 2001) when designing a dust monitoring programme and selecting the method of measurement.
- g) Results of dust deposition modelling carried out as part of an assessment of effects. These results may be compared to the trigger levels recommended in the Ministry for the Environment's *Good Practice Guide for Assessing and Managing the Environmental Effects of Dust Emissions* (January, 2001). Note that this method will have limited application to dispersed area sources or

small scale discharges. Its primary value lies in the prediction of the effects of point source dust discharges, such as stacks.

- h) Contents of dust diaries held by people living and working in the affected area. People may be requested to keep such a diary. The diaries would record details of any dust nuisance event, including the date and time of the event, weather conditions (wind speed and direction, rainfall) at that time, a description of the type and amount of the dust detected, and the duration of the dust event.
- i) Results of a public survey or field investigation commissioned by the Council or the discharger. In this case it is critical that the survey or investigation is professionally designed to ensure that credible and reliable information is gathered.
- j) Consideration of chronic and acute effects from exposure to dust. Chronic effects are low intensity, moderately unpleasant effects occurring frequently over a long period. Acute effects can occur from high intensity, more adverse effects occurring more infrequently.

AQ11.3 Explanatory Note

AQ11.3.1 The extent of dust nuisance should be determined from all available evidence relating to one or more dust events. In most cases the information specified in items f) to i) (dust monitoring, modeling, diaries and public surveys) will not be necessary. Ideally, good practice dust control measures will be implemented by the discharger to remedy objectionable or offensive effects without the need for expensive investigation. However, for large scale discharges with potential for significant nuisance or where enforcement action is likely to be required, some or all of the techniques discussed in items f) to i) may be required. Refer to AQ10.1.2 for a description of reverse sensitivity.