Appendix AQ1
information to be provided with resource consent applications

AQ.i The following particular information is required in addition to that set out in Chapter A7, in order to audit the resource consent application or request for approval. The information provided must be in such detail to correspond with the scale and significance of the actual and potential effects that the activity may have on the environment. In other words, if the environmental effects are likely to be minor, less detail will be required than if the effects could be significant or their extent is not known.

AQ1.1 Information to be provided for resource consent applications for discharges to air from:

1) small-scale fuel burning appliances that do not meet the stack requirements in Appendix AQ3

Resource consent applications must include the following information:

a) reason(s) why the stack does not meet the standards and conditions within Appendix AQ3.

b) a description of the type of fuel burning device, year of manufacture and installation, and (where applicable) particulate emission rates for that device as tested according to AS/NZS 4012 and 4013 or the functional equivalent thereof.

c) the height (proposed) of the emission stack above ground level and above the roof of the building containing the device.

d) a description of any fitting attached to the top of the chimney (e.g., rain hat, cone, rain excluder, wind deflector), which may affect the emission velocity and dispersion of contaminants.

e) the type of fuel burned, the amount of fuel burned per hour and the maximum sulphur and moisture content of that fuel.

f) the location of residential units and other nearby sensitive areas or activities that may be affected by the discharge.

g) the height, length and width of buildings within 25 metres of the discharge and physical structure such as bank or hill within 3 metres of the discharge point (these buildings can affect the dispersion of contaminants discharged). This is best achieved by preparing a sketch map.

h) an assessment of the effects of the discharge on the environment, with particular regard to the assessment criteria in Rule AQr.25.

i) description of alternative methods of discharge (including complying with the conditions of the rules) and reasons for the proposed choice.

j) any other information which, in the opinion of a resource consent officer of Nelson City Council, is necessary or desirable to assess the effect which the proposed activity may have upon the environment.

2) small-scale fuel burning appliances that do not meet the emission standards in Appendix AQ2

Resource consent applications must include the following information:

a) reason(s) why the discharge from the device does not come within or comply with the specified emission standard or thermal efficiency.

b) description of the type of device, year of manufacture and installation, and particulate emission rates for that device as tested according to AS/NZS 4012 and 4013:1999 or the functional equivalent thereof.

c) the type of fuel to be burned, the amount of fuel burned per hour and the maximum sulphur and moisture content of that fuel.

d) whether the application is for a single installation, or a application generic for a particular model of appliance.

e) any other information which, in the opinion of a resource consent officer of Nelson City Council, is necessary or desirable to assess the effect which the proposed activity may have upon the environment.

In the case of an application for a single installation, the following must also be supplied:

f) the location of residential units and other nearby sensitive areas or activities that may be affected by the discharge.

g) the height, length and width of buildings within 25 metres of the discharge and physical structure such as bank or hill within 3 metres of the discharge point (these buildings can affect the dispersion of contaminants discharged). This is best achieved by preparing a sketch map.

3) small-scale fuel burning appliances or open fires that are not 'lawfully installed'

Resource consent applications must include the following information:

a) reason(s) why the discharge from the device does not come within or comply with the criteria for permitted activities.

b) description of the type of device, year of manufacture and installation (if known), and (where applicable) particulate emission rates for that device as tested according to AS/NZS 4012 and 4013:1999 or the functional equivalent thereof.

c) the type of fuel burned, an estimate of the amount of fuel burned per day and the maximum sulphur and moisture content of that fuel.

d) any evidence to authenticate that the fire or burner was installed and was operable prior the date of notification of the Air Plan.

e) information addressing the relevant assessment criteria in the rule that is being infringed.

f) any other information which, in the opinion of a resource consent officer of Nelson City Council, is necessary or desirable to assess the effect which the proposed activity may have upon the environment.

AQ1.2 Information to be provided for resource consent applications for discharges to air from large-scale fuel burning appliances

Resource consent applications for discharges to air from large-scale fuel burning appliances must include the following information:

a) the type of fuel burned, the maximum amount of fuel burned per hour and per week, and the approximate hours of operation of the device.

b) the net heat output rating of the device, and the type and age of device.

c) the height (proposed) of the emission stack above ground level and above the roof of the building containing the device.

d) a description of the type of fitting attached to the top of the chimney (e.g., rain hat, cone, rain excluder, wind deflector), which may affect the emission velocity and dispersion of contaminants.

e) where appropriate, a description of any thermal insulation of the chimney and of any control equipment used to reduce the emission of contaminants such as sulphur dioxide.

f) where known, a list of contaminant gases and/or particulates discharged and an estimate of their emission rates where possible.

g) for solid fuel, the concentration of particulate matter in the emission stack(s).

h) where known, the predicted emission velocity and temperature of the discharge.

i) an assessment of the effects of the discharge on the environment. The techniques used to assess effects may include some or all of the following:

   i) knowledge of the effects of existing processes of similar size and type, including reference to industry standards.
   ii) dispersion modelling of contaminant emissions, where the emission rate has been estimated by calculation, measurement or from emission factors.
   iii) observation of the existing discharge and any effects.
   iv) information gathered from people who may be affected by an existing discharge, including surveys and examination of complaints records.
   v) extrapolation from known emissions and results of trials using scale models or trials of the process.
   vi) identification of nearby emission sources that may contribute to the cumulative effects of contaminants discharged.
   vii) an assessment of the cumulative effects of the discharge, in combination with emissions from the sources identified above and background levels.
   viii) the location of nearby sensitive areas or activities that may be affected by the discharge.
   ix) the height, width and length of nearby buildings and structures that may influence wind-flow and the dispersion of contaminants. This is best achieved by preparing a sketch map. This information is particularly important for sources where dispersion modelling may be required.

j) alternative methods of discharge, including reasons for the proposed choice, having particular regard to use of heating methods causing less particulate emissions.

k) an assessment of the effects of the discharge on the environment with particular regard to the assessment criteria in the relevant rule(s).

l) a list of any people who could be affected by the discharge. Describe any consultation undertaken with these people, including written approvals if these have been obtained. Nelson City Council can provide copies of standard forms for recording of written approvals, if required.

m) a description of any proposed monitoring of the discharge or effects. This monitoring may include:

  i) measurement of emissions.
  ii) measurement of contaminant concentrations in air within or beyond the site boundary.
  iii) records of the maintenance of equipment and emission control appliances to minimise emissions.
  iv) keeping records of material consumption and operating parameters related to emissions.
  v) regular inspections of the discharge and associated processes.
  vi) recording of any complaints relating to the discharge and action taken to remedy any identified cause of complaint.

n) any other information which, in the opinion of a resource consent officer of Nelson City Council, is necessary or desirable to assess the effect which the proposed activity may have upon the environment.

AQ1.3 Information to be provided for resource consent applications for discharges to air from industrial or trade premises or processes

Resource consent applications for discharges to air from industrial or trade premises or processes must include the following information:

a) a clear and concise description of all activities within the site that require resource consent for the discharge of contaminants into air. This description should include typical hours of operation and the quantity of materials consumed in the process that leads to the discharge of contaminants to air. A site map should be provided showing the location of all discharge sources.

b) where known, a list of contaminant gases and/or particulates discharged and an estimate of their emission rates where possible.

c) detail of the method of discharge from each process and the height (above ground level) of the discharge into air. For example, the discharge may be from a stack, a vent in the roof of a building, or a fugitive emission from stockpiles or open doorways. In the case of emission stacks, the temperature, emission velocity and any fitting above the stack (such as a rain excluder) should be specified.

d) the height, width and length of nearby buildings and structures that may influence windflow and the dispersion of contaminants. This is best achieved by preparing a sketch map. This information is particularly important for sources where dispersion modeling may be required.

e) the location of residential units and other nearby sensitive activities that could be affected by the discharge.

f) an assessment of the effects of the discharge on the environment. The techniques used to assess effects may include some or all of the following:

  i) knowledge of the effects of existing processes of similar size and type, including reference to industry standards.

ii) dispersion modelling of contaminant emissions, where the emission rate has been estimated by calculation, measurement or from emission factors.
iii) observation of the existing discharge and any effects.
iv) information gathered from people that may be affected by an existing discharge, including surveys and examination of complaints records.
v) extrapolation from known emissions and effects of scale models or trials of the process.

g) a list of mitigation measures proposed to prevent or reduce the predicted adverse effects. Some of these measures could be imposed as conditions of consent, such as minimum stack height, maximum quantity of material processed or contaminants discharged, use and maintenance of filters, or monitoring of the discharge.

h) a description of alternative methods of discharge that have been considered, including reasons for choosing the proposed method.

i) an assessment of the effects of the discharge on the environment with particular regard to the assessment criteria in the relevant rule(s).

j) a list of any people who could be affected by the discharge. Describe any consultation undertaken with these people, including written approvals if these have been obtained. Nelson City Council can provide copies of standard forms for recording of written approvals, if required.

k) a description of any proposed monitoring of the discharge or effects. This monitoring may include:

i) measurement of emissions.
ii) measurement of contaminant concentrations in air within or beyond the site boundary.
iii) records of the maintenance of equipment and emission control appliances to minimise emissions.
iv) keeping records of material consumption and operating parameters related to emissions.
v) regular inspections of the discharge and associated processes.
vi) recording of any complaints relating to the discharge and action taken to remedy any identified cause of complaint.

l) a description of any nearby emission sources that could, in combination with the proposed discharge, contribute to cumulative effects. Assess the additive effect of these emissions.

AQ1.4 Information to be provided for resource consent applications for discharges to air from outdoor burning

Resource consent applications for discharges to air from outdoor burning must include the following information:

a) the proposed time of year and time of day of burning.

b) expected duration of the burn.

c) approximate land area or volume of material to be burned.

d) the type and source of material to be burnt, including an estimate how dry the vegetation is, and in the case of vegetation, the length of time since it was cut.

e) the location of the burn and distances to sensitive activities that may be affected. This is best achieved by preparing a sketch map.

f) a description of any consultation undertaken with people who may be affected (as identified in (e) above) and the views expressed by those people.

g) a description of alternative methods of disposal of the material, including for vegetation mulching and composting, and reasons for the proposed choice.

h) an assessment of the effects of the discharge, having particular regard to the health, nuisance and visual effects of particulate matter emitted from the fire, and the assessment criteria in the relevant rule.

i) mitigation measures proposed, including maximising distance from sensitive areas, ensuring that vegetation is as dry as possible, and limiting burning to favourable weather conditions.

AQ1.5 Information to be provided for resource consent applications for discharges to air of agrichemical sprays

Resource consent applications for discharges to air of agrichemical sprays must include the following information:

a) the type of agrichemical and carrying agent to be discharged.

b) the qualifications of the person discharging the agrichemical(s) and the nature of any training undertaken by the operator in respect of the use of agrichemicals.

c) the proposed means to keep and maintain records of agrichemical application.

d) names and addresses of property owners or occupiers likely to be directly affected by the proposed discharge.

e) any consultation undertaken by the applicant with Nelson City Council, property owners or occupiers, Tangata Whenua, Crown Public Health Services or other persons, including the names of those consulted and their responses.

f) the proposed means of notifying those persons who may be affected by the spraying.

g) the proposed signage, where spraying occurs in a public amenity area or place of public assembly, or alongside a roadway.

h) the proximity of occupied residential units, public land and other areas where people reside or congregate, in relation to the proposed activity.

i) the sensitivity of neighbouring land uses and features.

j) an assessment of the effects of the discharge on the environment with particular regard to the assessment criteria in the relevant rule(s).

k) the extent to which particular weather conditions, including wind speed and direction, may be likely to cause a greater adverse effect than any other particular weather condition.

l) where relevant the extent to which the agrichemical causes, or is linked to chronic or acute human health effects, odour, annoyance, and diminished amenity values.

m) where relevant the extent to which the agrichemical is known to cause adverse effects on non-target flora, fauna, and ecosystems (particularly aquatic ecosystems).

n) the proposed method of application, including the type of spray equipment to be used, the spray volume and droplet size, the direction of the spraying and the height of release above the ground.

o) the extent to which the applicator can avoid spray drift, or spray drift into sensitive areas as indicated by points (i) to (l) above.

p) any other information which, in the opinion of a resource consent officer of Nelson City Council, is necessary or desirable to assess the effect which the proposed activity may have upon the environment.

AQ1.6 Information to be provided for resource consent applications for discharges to air from intensive farming

Resource consent applications for discharges to air from intensive farming must include the following information:

a) a description of the intensive farming activity, including the number of animals held, the number of buildings or pens, ventilation of buildings, waste collection and housekeeping procedures, effluent treatment and disposal systems. A site map should be provided showing the location of buildings, pens and waste treatment and disposal areas.

b) detail of the proposed mitigation measures to reduce odour and particulate emissions from processes within the intensive farm. These mitigation measures may include:

   i) buffer distances to the property boundary and nearby sensitive receptors.
   ii) frequent removal of manure from pens or buildings.
   iii) regular cleaning and housekeeping procedures.
   iv) use of aerobic waste treatment systems that minimise odour generation from anaerobic processes.
   v) use of shelter belts to reduce dispersion of spray droplets and particulate.

c) a management plan should be provided for the facility that specifies procedures for implementing the proposed control measures. Reference should be made to relevant codes of practice, such as those prepared by the pork and poultry industries.

d) the location of residential units and other nearby sensitive activities that could be affected by the discharge.

e) an assessment of the effects of the discharge on the environment. The techniques used to assess effects may include some or all of the following:

   i) comparison with the effects of existing processes of similar size and type, including reference to industry standards and codes of practice.
   ii) dispersion modelling of contaminant emissions, where the emission rate has been measured (using olfactometry, for example).
   iii) observation of the existing discharge and any effects.
   iv) information gathered from people that may be affected by an existing discharge, including surveys and examination of complaints records.
   v) extrapolation from known emissions and effects of scale models or trials of the process.

f) a description of alternative methods of discharge that have been considered, including reasons for choosing the proposed method.

g) an assessment of the effects of the discharge on the environment with particular regard to the assessment criteria in the relevant rule(s).

h) a list of any people who could be affected by the discharge. Describe any consultation undertaken with these people, including written approvals if these have been obtained. Nelson City Council can provide copies of standard forms for recording of written approvals, if required.

i) a description of any proposed monitoring of the discharge or effects. This monitoring may include:

   i) maintenance of waste treatment systems to minimise emissions.
   ii) keeping records of farm management procedures and compliance with a management plan.
   iii) regular inspections of potentially odorous processes.
   iv) recording of any complaints relating to the discharge and action taken to remedy any identified cause of complaint.

j) any other information which, in the opinion of a resource consent officer of Nelson City Council, is necessary or desirable to assess the effect which the proposed activity may have upon the environment.

AQ1.7 Information to be provided for resource consent applications for discharges to air from waste management processes

Resource consent applications for discharges to air from waste management processes must include the following information:

a) a description of the waste management process, including the maximum quantity of waste stored, deposited or processed, the composition of the waste (including any hazardous substances), and the method of waste treatment and disposal. A site map should be provided showing the location of buildings, and waste treatment and disposal areas.

b) detail of the proposed mitigation measures to reduce odour and particulate emissions from the facility. These mitigation measures may include:

   i) buffer distances to the property boundary and nearby sensitive receptors.
   ii) erection of screening to minimise transfer of particulate matter and litter to neighbouring properties.
   iii) regular maintenance of waste treatment systems.
   iv) use of aerobic waste treatment systems that minimise odour generation from anaerobic processes.
   v) covering or enclosure of potentially odorous or dusty processes.
   vi) use of shelter belts to reduce dispersion of spray droplets from effluent application, or particulate.

c) a management plan should be provided for the facility that specifies procedures for implementing the proposed control measures.

d) the location of residential units and other nearby sensitive activities that could be affected by the discharge.

e) an assessment of the effects of the discharge on the environment. The techniques used to assess effects may include some or all of the following:

   i) knowledge of the effects of existing processes of similar size and type, including reference to industry standards and codes of practice.

ii) dispersion modelling of contaminant emissions, where the emission rate has been measured (using olfactometry, for example).
iii) observation of the existing discharge and any effects.
iv) information gathered from people that may be affected by an existing discharge, including surveys and examination of complaints records.
v) extrapolation from known emissions and effects of scale models or trials of the process.

f) a description of alternative methods of discharge that have been considered, including reasons for choosing the proposed method.

g) a list of any people who could be affected by the discharge. Describe any consultation undertaken with these people, including written approvals if these have been obtained. Nelson City Council can provide copies of standard forms for recording of written approvals, if required.

h) an assessment of the effects of the discharge on the environment with particular regard to the assessment criteria in the relevant rule(s).

i) a description of any proposed monitoring of the discharge or effects. This monitoring may include:

i) maintenance of waste treatment and disposal systems to minimise emissions.
ii) keeping records of waste management procedures and compliance with a management plan.
iii) regular inspections of potentially odorous or dusty processes.
iv) measurement of contaminant concentrations in air within or beyond the site boundary.
v) recording of any complaints relating to the discharge and action taken to remedy any identified cause of complaint.

j) any other information which, in the opinion of a resource consent officer of Nelson City Council, is necessary or desirable to assess the effect which the proposed activity may have upon the environment.