

Appendix AQ8

guide to outdoor burning (rural)

AQ8.1 NOTE that a fire permit is also required for all fires in rural areas (contact the Waimea rural fire authority)

AQ8.2 Burning of vegetation, cardboard, paper and untreated wood

a) **Burn dry seasoned material**

- i) Except stumps and standing dead vegetation (see AQ8.3 Vegetation and stump burn offs), vegetation should be allowed to dry for at least four weeks in summer and six weeks in winter prior to burning.
- ii) Stumps must be cleaned of excessive soil and left to dry for at least 6 months.
- iii) Heap stumps to provide good airflow.

b) **Locate the fire sensitively**

- i) The fire should be at least 50 metres from a formed public road.
- ii) Try to locate the fire at least 50 metres upwind from any house on a neighbouring property, or any sensitive activity. However, depending on wind direction and size of property, large setbacks will be appropriate. In some situations it may be preferable to have the fire sited close to the upwind boundary.

c) **Monitor weather conditions**

- i) Check forecast wind strength and direction during the intended day of burning.
- ii) Don't light fires in wind speeds greater than about 15 kph (leaves and the smallest twigs move in the wind). The ash produced on the fire is more likely to be blown about if winds are stronger than this, and the discharges will travel further in high wind conditions.
- iii) Don't burn in calm, highly stable conditions (which encourage the development of temperature inversions). They commonly occur in winter. In these situations the smoke will hang about and not rise.
- iv) Burn after 10am and before 3pm in winter and only place on fuel that will be completely burnt by 5pm.
- v) In summer burn in coolest part of day, and not in windy conditions.
- vi) Don't burn when wind will blow smoke toward neighbouring houses. You may not always be able to avoid smoke going towards a neighbouring house (see (b) above). It is important to discuss your plans for burning with your neighbour to help reduce potential conflicts.
- vii) In some situations a good wind can be useful for dispersing smoke.
- viii) Don't burn if wet weather is likely to cause smoke problems because of damp material.

d) **Stack the material carefully**

- i) Vegetation and wood should be stacked loosely, not compacted.
- ii) Minimise the size of the fire. Avoid burning more than 2 cubic metres at a time.

- e) **Manage the fire well**
- i) A small fire should be started with the driest material and fed gradually with further material once the fire is “blazing”.
 - ii) Do not allow a fire to smolder.
 - iii) Feed new material onto the top.
 - iv) The fire should not be left unattended once started.
 - v) Small quantities of paper, kindling, kerosene or diesel may be used as accelerants.
- f) **Prohibited materials**
- i) Burning used or waste oil, materials associated with the recovery of metals from insulated electrical cables, any radioactive materials, or materials with radioactive components, materials and metals that are components of motor vehicles or mechanical or electrical equipment, treated timber or fibreboard, any plastic or plastic products (except plastics containing only polyethylene – marked with No. 2 recycling arrow), rubber products including tyres, bitumen-containing materials, batteries, or asbestos product are prohibited from being burnt under the Council’s rules (see Rule AQR.20). Burning of polyethylene agricultural wrap or High Density polyethylene agricultural chemical containers requires a resource consent (see AQR.55).

AQ8.3 Vegetation and stump burn offs

- a) Obtain a weather forecast. Regard should be had to the forecast wind strength and direction during the intended day of burning. Burning should not occur when either very strong winds are predicted, or calm, highly stable conditions are predicted to occur in winter where a temperature inversion may develop.
- b) Plan your fire carefully. Consider light up patterns, fire breaks, wind speed and direction, fire fighting resources that may be required, supervision, insurance cover, notification of the fire service or fire authority, and neighbours. Seek advice from your Rural Fire Authority.

AQ8.3A Burning of polyethylene agricultural wrap

- a) Polyethylene agricultural wrap should be kept as dry and clean as possible. Muddy and wet wrap does not burn well and causes unnecessary smoke.
- b) Polyethylene agricultural wrap should only be burned atop a blazing fire fuelled by vegetation or untreated wood. Small loose bundles of wrap should be added to the vegetation fire once it is burning well. Because plastic melts readily, ensure it does not catch around you when feeding the fire.
- c) Burning of any other plastics in this manner is prohibited, including (but not limited to) plastics containing halogens or phosphorus components.

AQ8.3B Burning of agrichemical or animal remedy containers

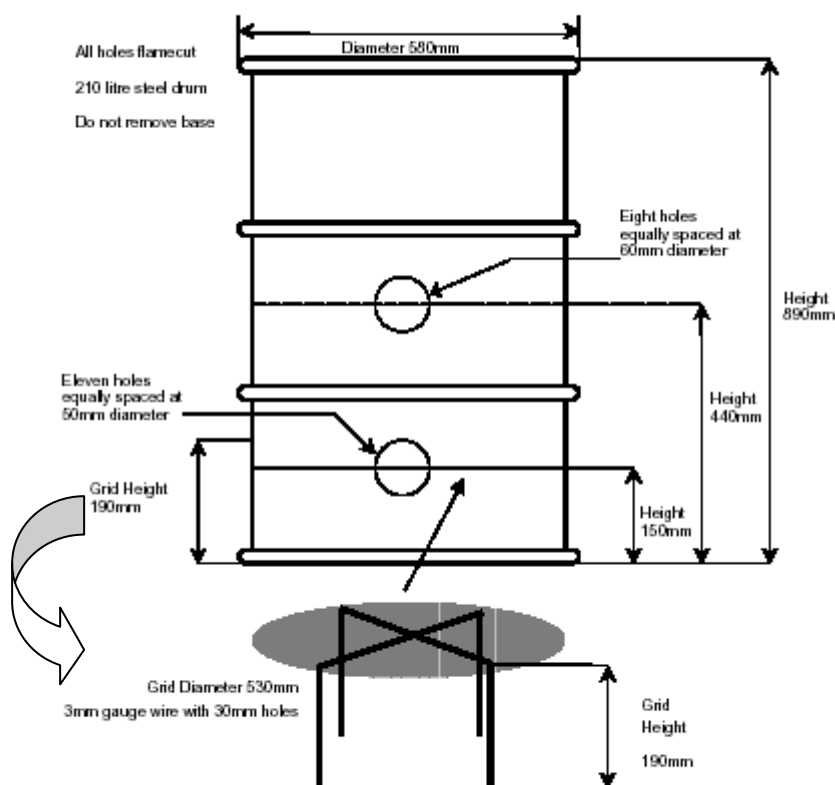
- a) Any containers that are not constructed solely of polyethylene shall not be burned. Check container labels and do not incinerate any that state “do not dispose of by burning.” Containers labelled with a recycling triangle with 1 or 3 inside contain halogens and they **must not** be burnt.

Agrichemical or animal remedy containers that have a recycling triangle with a 2 or 4 should be prepared for burning by being cleaned and triple rinsed according to the following procedure:

- i) empty the contents of the container into an appropriate holding tank, turning the container so that any product trapped in the handle is allowed to flow out. Once flow is down to a drip, allow the container to drain for an additional 30 seconds, and
 - ii) fill the empty container $\frac{1}{4}$ full with clean water. Replace the cap on the container, and
 - iii) shake the container vigorously, for 30 seconds, and
 - iv) drain the rinse water into an appropriate holding tank as for Step (i) above, and
 - v) repeat the above procedure two more times.
- b) Carefully rinse any residue from the cap and the outside of the container into an appropriate holding tank.
- c) Refer to the Management of Agrichemicals Code of Practice (NZS 8409:2004), or seek advice from Nelson City Council, or chemical suppliers before disposing of any excess agrichemicals.
- d) Regard should be had to the forecast wind strength and direction during the intended day of burning. Burning should not occur when either: very strong winds are predicted; or calm, highly stable conditions are predicted to occur in winter where a temperature inversion may develop.
- e) Agrichemical containers should be burnt using an incinerator constructed from a 210-litre steel drum according to the AGCARM (New Zealand Association for Animal Health and Crop Protection) design as shown in the diagram attached (alternatively, if there are only a few containers to be burnt, they can be disposed of atop a blazing fire). It is important that the design is followed accurately because the configuration and size of the holes, and the grate sizing, are critical to the performance of the incinerator.
- i) Site the incinerator over a concrete slab, not porous shingle, well away from any watercourses, wells and buildings.
 - ii) Containers should be burned with their outer cardboard cases where possible.
 - iii) Place loosely crushed cardboard on the grate of the incinerator. Do not pack cardboard tightly. Light the cardboard.
 - iv) When the cardboard is burning strongly, remove the cap and add the first container (inside the cardboard outer if possible).
 - v) Once the fire is burning fiercely, add another container. Wait until the fire is burning vigorously before adding more containers. If the fire wanes add more cardboard. Containers should be added at a rate equivalent to approximately one 20-litre vessel every two minutes.
 - vi) Do not load the incinerator to more than 90% of the drum capacity above the grate.

- vii) Dry pine cones or untreated wood can be added to the fire to maintain good combustion conditions after the last container has been placed in the incinerator.
 - viii) Supervise the incinerator at all times.
- f) The fire will become extremely hot. Approach the incinerator from upwind and avoid breathing any smoke or fumes. Thick leather protective gloves should be used as a precaution.

AGCARM incinerator design specifications



AQ8.4 Advisory notes

- a) Burning resulting in the dispersal or deposition of particles that causes an objectionable or offensive effect or an unreasonable nuisance beyond the boundary of the property where the discharge originates, may be subject to enforcement action. However, following the steps above should help prevent such adverse effects. In deciding on whether enforcement action will be taken, Nelson City Council staff will be guided by the "Protocol for Assessing Offensive or Objectionable Dispersal or Deposition of Smoke Particles" in Appendix AQ9.
- b) Alternatives such as composting, mulching or chipping should be considered before proceeding with outdoor burning. Commercial mulching equipment may be available for large volumes of greenwaste material, including gorse.

Using an alternative method may be the only way to avoid creating adverse smoke effects in some circumstances.