

**HAWKE'S BAY REGIONAL COUNCIL**  
**ENVIRONMENTAL MANAGEMENT COMMITTEE**

**Wednesday 17 September 2008**

**SUBJECT: DRAFT AIR QUALITY PLAN CHANGE**

**REASON FOR REPORT**

1. In October 2004 the Ministry for the Environment (MfE) introduced national environmental standards for air quality. This report outlines the contents of a draft plan change to assist the Council in improving air quality within the region to a standard which achieves compliance with the Resource Management (National Environmental Standards Relating to Certain Air Pollutants, Dioxins and Other Toxics) Regulations 2004 (NESAQ).
2. Because this plan change has been drafted specifically in response to the NESAQ, it is not proposed that it will comprehensively review all air quality and air discharge provisions within the Regional Resource Management Plan (RRMP).
3. The report concludes that the Council can achieve the NESAQ for PM<sub>10</sub> only through introducing new rules to the Plan. These rules are outlined in Attachment 1.
4. Where the Council does have greater discretion, and where it is recommended that the Council undertakes further consideration, is in the use of other mechanisms. These include financial incentives, communication and marketing, and public education. These can help to ease the transition for households toward home heating solutions which do not lead to breaches of the NESAQ.
5. Council direction is sought on these alternative mechanisms at this meeting. Prior to finally adopting a proposed plan change in November it is recommended that the Council undertake a Section 32A analysis so that all the alternatives and costs and benefits for the Proposed Plan Change are comprehensively understood.

**COMMENT**

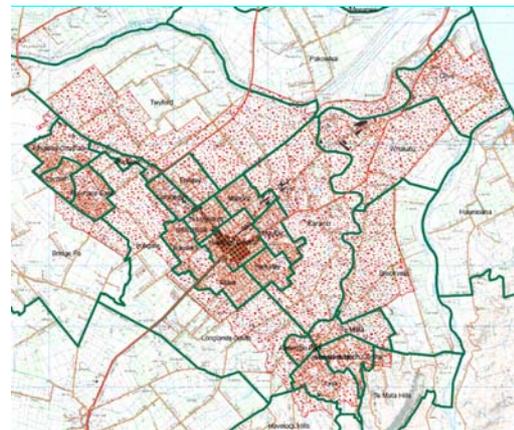
**Why change the current Plan provisions?**

6. The Resource Management Act (RMA) includes in the definition of sustainable resource management, *safeguarding the life supporting capacity of air.... [s5(2)(b)]* and states the function of regional council's as *...control of discharge of contaminants into or onto land, air ... [s30(1)(f)]*. As part of a nationwide approach to management of air quality, the Government introduced five new ambient air standards covering fine particles (PM<sub>10</sub>), nitrogen dioxide (NO<sub>2</sub>), ozone (O<sub>3</sub>), sulphur dioxide (SO<sub>2</sub>), carbon monoxide (CO) in order to protect human health.
7. While outdoor air quality is generally good for most of the time in the Hawke's Bay Region, monitoring indicates that high PM<sub>10</sub> levels occur over the Napier and Hastings urban centres on cold, clear winter nights.
8. All other contaminant concentrations are well within the MfE guidelines, meaning they do not need to be addressed via a plan change process.
9. The NESAQ through Regulation 14 requires the Council to manage discharges to air so that by 2013 the amount of PM<sub>10</sub> in the air does not to exceed a 24 hour average of more than 50 µg/m<sup>3</sup> once per year.

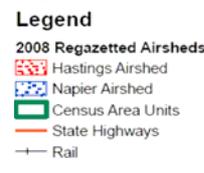
10. After this date, if this standard has not been achieved, resource consents to discharge PM<sub>10</sub> into the air cannot be granted. This would result in significant implications for the community in terms of loss of employment and local industry from the area because it is typically industrial activities that require resource consents for their air discharges.
11. Regulation 14 requires Councils to identify and gazette areas within their region that are likely to exceed the standard, into separate airsheds, with any un-gazetted areas forming a default 'greater region' airshed.
12. In 2005, the Hawke's Bay Regional Council identified and gazetted two airsheds over the Napier and Hastings urban areas for the purposes of managing local ambient air quality. These airsheds are currently in the process of being re-gazetted. This will result in an expansion of the Hastings and Napier airsheds, and the addition of two new airsheds, being Whirinaki and Awatoto.
13. The Whirinaki and Awatoto airsheds are different to the Napier and Hastings airsheds because industry is the principal source of PM<sub>10</sub> as opposed to domestic heating in the Napier and Hastings airsheds. Rules surrounding the Whirinaki and Awatoto airsheds will be presented at a later date. The new boundaries of the Napier and Hastings airsheds are illustrated below.



**Figure 1: Napier Airshed**



**Figure 2: Hastings Airshed**



14. Within exceeding airsheds, Regulation 17 requires the implementation of a path to compliance, with the path starting at 1 September 2005 and ending 1 September 2013. The Council has previously adopted a straight line path to compliance for the Napier and Hastings airsheds, which is presented in Figures 3 and 4.

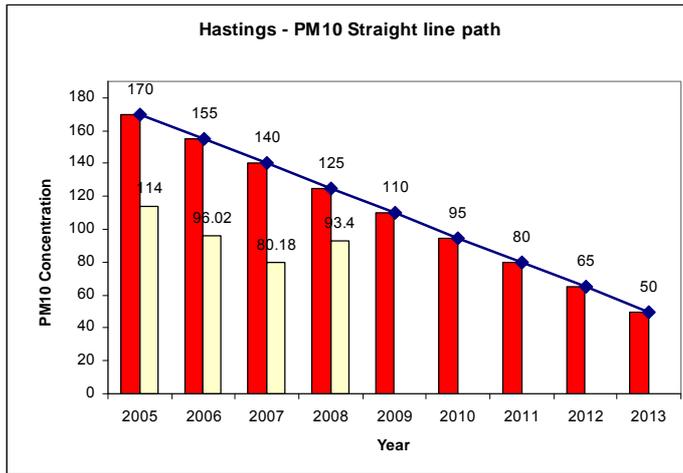


Figure 3: Straight line path for Hastings, as at 1 September 2005

**Legend**

Red bar – target 24 hour PM<sub>10</sub> concentration for that year.

Yellow bar – second highest recorded 24 hour PM<sub>10</sub> concentration recorded for that year.

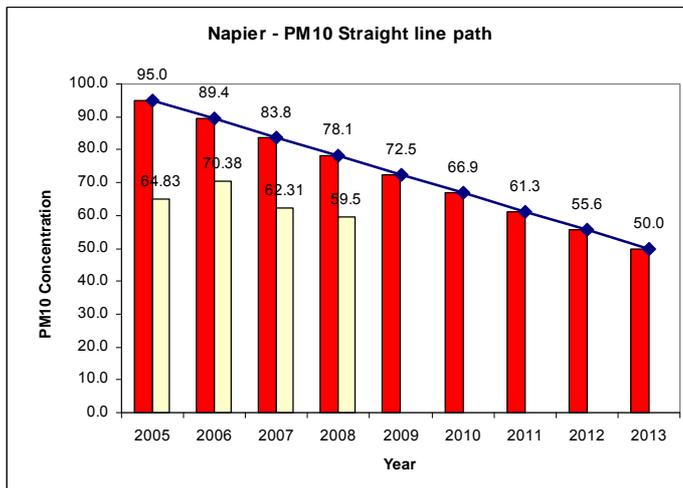


Figure 4: Straight line path for Napier, as at 1 September 2005

**Legend**

Red bar – target 24 hour PM<sub>10</sub> concentration for that year.

Yellow bar – second highest recorded 24 hour PM<sub>10</sub> concentration recorded for that year.

### Hawke's Bay Air Quality

15. Monitoring of air quality and meteorology has been conducted routinely in Napier since 2000 and in Hastings since 2003, by the Hawke's Bay Regional Council.
16. Air sampling has occurred continuously in Napier and Hastings since 2005, and 2006, respectively. Prior to this, air sampling occurred every 1 in 3 days.
17. The following table details the number of NESAQ breaches for PM<sub>10</sub> in Napier and Hastings since 2006.

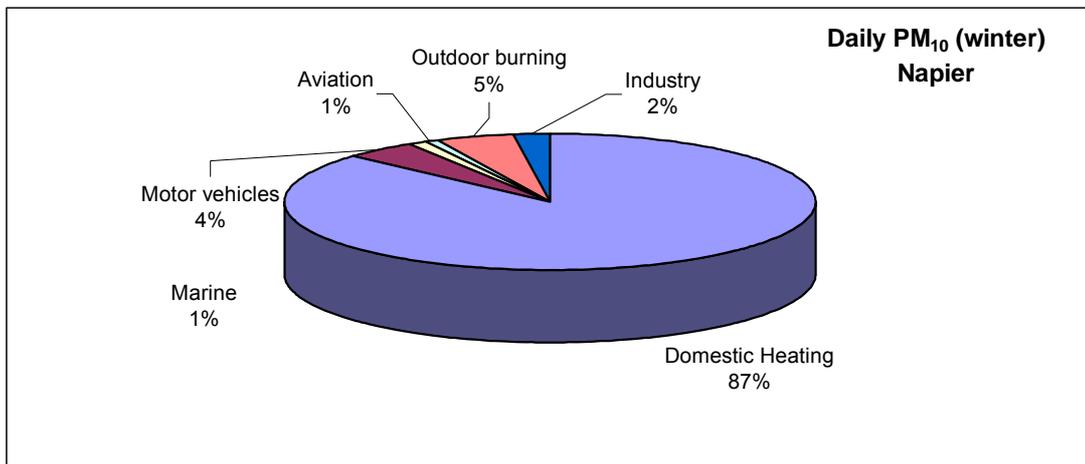
**Table 1: NESAQ breaches in Napier and Hastings**

Location	Number Breaches in 2006 (days/year)	Number Breaches in 2007 (days/year)	Number Breaches in 2008 to 4/8/08 (days/year)
Hastings	18	13	27
Napier	3	5	6

18. From the data collected the greatest number of exceedances occurs in Hastings.

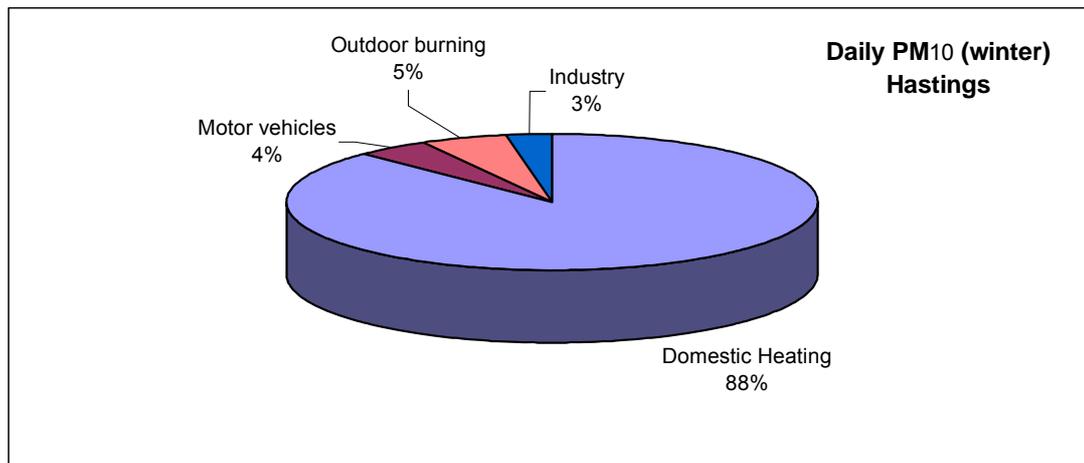
**The Issue – looking ahead**

19. The issue of ambient air quality management and associated responsibilities is complex and needs a well thought out approach.
20. As detailed above, currently the air quality monitoring results for the Hawke’s Bay Region show that the NESAQ for PM<sub>10</sub> is breached in both the Napier and Hastings airsheds.
21. In order to quantify discharges to air and find out the exact nature of the problem the Council commissioned an ‘inventory of emissions’ to find out the sources of pollution in the Hawke’s Bay Region.
22. The Emissions Inventory looked at the following four main sectors being, domestic, industry, transport and outdoor burning, to determine the contribution to the overall levels of PM<sub>10</sub> in the Hawke’s Bay. The inventory also recorded a variety of other minor contributors to PM<sub>10</sub> levels in the Napier and Hastings airsheds.
23. In Napier, the source sector that has the greatest impact on daily winter PM<sub>10</sub> emissions is domestic heating which contributes 87%. Other contributions percentages are indicated in Figure 5 below.



**Figure 5: Relative contributions of different sources to average daily winter PM<sub>10</sub> in Napier**

24. In Hastings, the domestic heating sector also has the greatest impact on daily winter PM<sub>10</sub> emissions contributing 87%. Other contributions percentages are indicated in Figure 6 below.



**Figure 6: Relative contributions of different sources to average daily winter PM<sub>10</sub> in Hastings**

25. The emissions inventory found that 10,900 households in Napier, and 8,800 of the households in Hastings rely on solid fuel burning for domestic heating. The emissions inventory further broke down the types of solid fuel burning appliances that were being used within Napier and Hastings. This is detailed in Table 2 below.

**Table 2: Number of different solid fuel burner types in Napier and Hastings**

City	# wood burners	# open fires	# multi fuel burners
Napier	7630	1744	1526
Hastings	6600	1320	880

### Issue Complexity

26. There is a range of regulatory and non regulatory methods available to assist the Council to achieve the NESAQ target for PM<sub>10</sub> by 2013. The different management options available to Council to reduce PM<sub>10</sub> levels in both Napier and Hastings are outlined in Sections 32 and 34.
27. It needs to be noted that undertaking a solely regulatory approach would work together with an effective enforcement approach. This approach has been adopted in some other regions, notably Otago. However it may result in social and economic costs in this region which Council is not wishing to generate and be viewed as unnecessary by the community.
28. There are a number of matters to evaluate when considering the options to reduce PM<sub>10</sub> concentrations over the Napier and Hastings urban areas. This section firstly investigates the environmental issues that result from having high levels of PM<sub>10</sub> within our air, and secondly looks at the resulting socio economic issues that may occur from introducing measures to reduce PM<sub>10</sub> concentrations within our air.

## **Environmental-health Issues**

29. Both Napier and Hastings have a winter air pollution problem, with the NESQA for PM<sub>10</sub> being exceeded many times each year. Technically, PM<sub>10</sub> stands for particulate matter less than 10 microns (millionths of a meter) in diameter, which is a fraction of a width of a human hair. PM<sub>10</sub> causes visible pollution that people can see on a winter's day, and can be inhaled deep into the lungs resulting in adverse health effects.
30. The health effects of PM<sub>10</sub> are widely known and are of major concern throughout the world. The reason researchers and health authorities concentrate on PM<sub>10</sub> is that these particles are so small that they are not filtered out by the natural defences in human noses and throats. Instead they get inhaled and lodge deep in people's lungs causing adverse health impacts. Health effects from PM<sub>10</sub> range from minor nose and throat irritations and asthma symptoms to more severe impacts such as bronchitis, and respiratory illness which results in hospital admissions and premature mortality. The elderly, young children (in particular premature infants) and people with pre-existing conditions are more susceptible to health impacts of exposure to PM<sub>10</sub>.
31. Health impact studies also measure what is known as restricted activity days. A restricted activity day is when a person's normal activities are altered because of high levels of PM<sub>10</sub>. For example, on days with high PM<sub>10</sub> concentrations people may spend the day in bed, miss work, be unable to exercise, or other normal activities are altered because of exposure to particles.
32. Although the NESQA for PM<sub>10</sub> is set at 50 µg/m<sup>3</sup> (24-hour average), PM<sub>10</sub> is considered a 'no threshold contaminant'.
33. This means there is no known safe level below which effects will not occur.
34. Thus even at the guideline concentrations, health impacts still occur from exposure to PM<sub>10</sub>. Studies on the acute health effects of PM<sub>10</sub> around the world show increases in overall mortality of about 1% for every 10 µg/m<sup>3</sup> increase in 24 hour average PM<sub>10</sub> concentrations.
35. Besides the issue of health impacts, any actions that the Council chooses to take in order to improve air quality can have associated financial and socio-economic costs. The potential socio economic costs are discussed below.

## **Socio-economic Issues**

36. Potential socio-economic impacts associated with restrictions on the use of solid fuel burning appliances make the issue more complex.
37. To help determine these issues, the Council engaged Sean Bevin from Economic Solutions Limited to carry out a social impact assessment, and Emily Wilton from Environet to provide information on household heating methods.
38. Both reports assist in understanding the potential impact of any measures proposed to reduce emissions from domestic heating.
39. There are several factors that will influence which households will be affected by any future policies brought in by the Council to address PM<sub>10</sub>.
40. Of special interest are those households with relatively low household income, and households in rental accommodation. Income level will affect a household's financial ability to make any changes required, while ownership influences who makes the decision.
41. The emission inventory found that in Hastings and Napier, just under 2000 households (15%), and 2200 households (12%), respectively, rely on solid fuel burning for domestic heating in rented accommodation. It is important to note that in these houses,

future heating methods will be at the discretion of landlords should solid fuel methods be regulated.

42. In addition, the emission inventory found approximately 40% of wood used in Napier and Hastings is obtained notionally "free of charge". If landlords, or regulations do not allow the replacement of burners with lower cost heating options (e.g. NES compliant burners) these households could be facing significant increases in space heating expenditure because of the higher cost of most electric or gas heating options relative to obtaining wood free of charge.
43. An additional consideration is the high percentage of the local population over 60 years of age who use open fires and wood burners. The emission inventory indicates that there are around 1850 such households (13.5%) in Hastings, and 1580 such households (8%) in Napier.
44. Generally, people over 60 years of age are more likely to have limited income and may find it difficult to meet the cost of conversion to cleaner heating. Equally, older people do struggle more to use wood as an energy source due to storage and handling difficulties.
45. Conclusions contained within Sean Bevin's report indicate that approximately a third of households in Napier and Hastings have an annual income under \$30,000, which is a significantly lower income level when compared to the country as a whole.
46. In addition to this the majority of the households using wood burners tend to be located within the older and lower socio-economic parts of Napier and Hastings. There are however some exceptions to this, for example Havelock North has a high use of wood burners.
47. An important consideration in any approach that the Council takes to address PM<sub>10</sub> is whether households should meet the full cost of upgrading their heating systems themselves, or whether special assistance should be provided.
48. If households in the lower income areas were required to bear the full cost of upgrading their domestic heating appliance immediately, this would have a significant cost impact in terms of the percentage of their income spent on heating.
49. For example approximately 15% of a \$30,000 household income and 20% for a \$20,000 income household (these figures are based on the Nelson and Canterbury heating upgrade/conversion cost). The different financial options available to the Council to assist households are addressed in section 74.

#### **Analysis of Options – Domestic Heating Appliances and Outdoor Burning**

50. In Hastings and Napier, PM<sub>10</sub> emissions need to be reduced by 71% and 47% respectively, in order to comply with the NESAQ by 2013.
51. In early 2007 the Council commissioned Emily Wilton from Environet Limited to provide different management options to reduce PM<sub>10</sub> in the Hawke's Bay region and to evaluate the effectiveness of each these options.
52. A summary of the different scenarios and the different options for Council to consider using to meet the preferred scenario is addressed in this section.

#### **Scenarios that will not meet the NESAQ target**

53. While industrial, motor vehicle and outdoor burning contribute to daily wintertime PM<sub>10</sub> emissions even if they were reduced to zero by 2013, the NESAQ for PM<sub>10</sub> would not be met.
54. In both Hastings and Napier, removal of all open fires even when replaced with clean heating appliances will not result in NESAQ compliance, and in Hastings removal of all

open fires and domestic solid fuel burners with 100% replacement with NESQA compliant burners would also not meet the NESQA for PM<sub>10</sub> by 2013.

### **Scenarios that will meet the NESQA target**

55. Environet's report indicates that the most effective way to achieve NESQA compliance by 2013 is through strict management of domestic heating emissions. The different management options for both Napier and Hastings are detailed below.

#### **Napier**

56. In Napier approximately 87% of the total PM<sub>10</sub> emissions come from domestic fires, and 5% of the total PM<sub>10</sub> emissions come from outdoor burning. The Environet report calculated that the NESQA for PM<sub>10</sub> could be achieved in Napier if:
- 56.1. outdoor burning is prohibited; and
  - 56.2. all of the existing solid fuel burners not meeting the NESQA design criteria for wood burners were removed and replaced with NESQA compliant solid fuel burners, pellet burners and/or clean heating alternatives.
57. There are 10,900 burners within the Napier airshed. 100% percent of these houses will be required to replace their solid fuel burners with NESQA compliant burners or clean heating alternatives by 1 September 2013 at the latest.

#### **Hastings**

58. In Hastings approximately 88% of the total PM<sub>10</sub> emissions come from domestic fires, and 5% of the total PM<sub>10</sub> emissions come from outdoor burning. The Environet report calculated that the NESQA for PM<sub>10</sub> could be achieved in Hastings if:
- 58.1. outdoor burning is prohibited and
  - 58.2. all existing solid fuel burners not meeting the NESQA design criteria for wood burners were removed and replaced with a combination of NESQA compliant wood burners, and clean heating alternatives. At a minimum, at least 44% of existing solid fuel burners will need to be replaced with clean heating alternatives in order to meet the NESQA.
59. There are 8,800 burners within the Hastings airshed. Translating the percentages above to this figure, 5,000 solid fuel burners need to be replaced with NESQA compliant burners; the remaining 3,800 solid fuel burners will need to be replaced with clean heating alternatives. Alternatively, by reducing the number of NESQA compliant burners in the airshed additional room is made for pellet burners. For example, 4,000 NESQA compliant solid fuel burners would leave room for 2,000 pellet burners to be installed within the airshed.

### **Regulation**

60. Prior to a plan change being publicly notified, Council has a responsibility under Section 32 of the Resource Management Act to carry out an evaluation which examines "*a) the extent to which each objective is the most appropriate way to achieve the purpose of the Act, and b) whether, having regard to their efficiency and effectiveness, the policies, rules, or other methods are the most appropriate for achieving the objectives*".
61. This section presents the regulatory methods necessary to achieve the outcomes stated above, with the following sections presenting other methods which could be used to assist the Council in achieving the objectives stated in Table 3.
62. The following table presents the proposed regulatory methods that are necessary to achieve each objective.

63. Information on the table also indicates the potential effects that could occur by undertaking a reasonably stringent regulatory approach.
64. It is noted that these rules rely on assumptions about household behaviour, for example it has been assumed that 30% of people who currently use wood burners will change to cleaner forms of heating such as heat pumps.
65. If Council wants to use a regulatory approach in which they can be certain of success, the rules below will need to be amended to read that no new solid fuel burners (including pellet fires) are allowed within the Napier and Hastings airsheds, and only 5000 NESAQ compliant wood burners are allowed in the Hastings airshed with the rest converting to clean heating alternatives.

**Table 3: Proposed regulatory methods necessary to achieve the NESAQ for PM<sub>10</sub> by 2013**

Objective	How	Effects
<p>Achieve 100% removal and replacement of non complying domestic solid fuel burners and open fires within the Hastings airshed.</p>	<p>New rules and policies in the RRMP including the following:</p> <ul style="list-style-type: none"> <li>• Phasing out the use of domestic open fires - their use will be prohibited on properties located within the Hastings airshed by 2011.</li> <li>• Phasing out of all burner types except NESAQ compliant burners from 2013 (done by introducing a new emission standard for all domestic heating appliances), and replacement of the phased out burners with NESAQ compliant burners, clean heating alternatives or pellet fires.</li> <li>• Prohibiting the installation of any solid fuel appliance, except very low emitting pellet fires (0.8 g/kg), in new dwellings and/or in existing dwellings which do not already use solid fuel for heating (this rule places a cap on the total number of solid fuel appliances at current levels).</li> </ul>	<p>Some households will be seriously affected by a stringent regulatory approach, particularly low income households, or those households with a resident over age 65. A stringent regulatory approach will potentially result in the following:</p> <ul style="list-style-type: none"> <li>• Those households which are unable to afford the conversion costs and/or ongoing running costs associated with clean heating alternatives will experience colder homes.</li> <li>• A risk to individual health and lifestyle related to reduced indoor temperature levels. Colder homes are likely to have associated risks of ill health, increased medical/hospital costs and increased restricted activity days.</li> </ul>

Objective	How	Effects
<p>Achieve 100% removal and replacement of non complying domestic solid fuel burners and open fires within the Napier Airshed.</p>	<p>New rules and policies in the RRMP including the following:</p> <ul style="list-style-type: none"> <li>• Phasing out the use of domestic open fires - their use will be prohibited on properties located within the Napier airshed by 2011.</li> <li>• Phasing out of all burner types except NESAQ compliant burners from 2013 (done by introducing a new emission standard for all home heating appliances), and replacement of the phased out burners with NESAQ compliant burners, clean heating alternatives or pellet fires.</li> </ul>	<p>Some households will be seriously affected by a stringent regulatory approach, particularly low income households, or those households with a resident over age 65. A stringent regulatory approach will potential result in the following:</p> <ul style="list-style-type: none"> <li>• Those households which are unable to afford the conversion costs and/or ongoing running costs associated with clean heating alternatives will experience colder homes.</li> <li>• A risk to individual health and lifestyle related to reduced indoor temperature levels. Colder homes are likely to have associated risks of ill health, increased medical/hospital costs and increased restricted activity days.</li> </ul>
<p>Prohibit outdoor burning or implement rules to ensure that PM<sub>10</sub> is negligible from outdoor burning.</p>	<p>New air rules and policies in the RRMP including the following:</p> <ul style="list-style-type: none"> <li>• Outdoor burning of vegetative matter, paper, cardboard and untreated wood on a properties located within the Hastings or Napier airsheds will need resource consent to take place during the months of May to August, otherwise the activity is permitted (subject to conditions).</li> <li>• Resource consents will be granted on the basis that outdoor burning takes place only under certain weather conditions for example, not on calm clear cold days when it is likely an inversion layer exists.</li> </ul>	<p>A stringent regulatory approach will potentially result in the following:</p> <ul style="list-style-type: none"> <li>• Financial expense, and inconvenience for orchardists having to gain resource consent to undertake burning during the months of May to August.</li> <li>• Enforcement complications. For example because of the hassle/expense in obtaining resource consent, some orchardists may deviously light the fire at times unlikely to be noticed by neighbours or passersby (e.g. late on a Sunday night)</li> <li>• Financial expense associated with alternative disposal methods.</li> <li>• Increased volume of rubbish to the landfill, particularly an increase in green waste.</li> <li>• Illegal dumping of rubbish.</li> </ul>

## **Enforcement**

66. Compliance is a key factor in meeting the NESAQ for PM<sub>10</sub> by 2013. Voluntary compliance is obviously desirable and may be increased through education aimed at increasing awareness of the sources and impacts of poor air quality, and incentive programmes aimed at providing financial assistance, along with subsidies to encourage people to change to cleaner forms of heating.
67. However it is unlikely that all households will comply with the proposed measures, meaning that enforcement options need to be considered.
68. A ban on outdoor rubbish burning and the burning of crop residue during the winter months without resource consent is also likely to require enforcement, particularly in the early stages as awareness of the ban and while the consequences of not complying are established. An initial warning approach followed by fines for repeat offenders is likely to improve compliance.
69. It is likely that more resources will be needed to enforce the ban on open fires and selected wood burners. A close working relationship will need to be maintained with territorial authorities to ensure good record keeping of permitted burner installations is maintained. Non compliance with the regulations could be detected by smoke "wardens" who check households for discharges and compare addresses where discharges occur to a register of permitted dwellings. As mentioned above an initial warning approach followed by fines for repeat offenders is likely to improve compliance.

## **Methods Other Than Rules**

70. Besides rules, there are a range of non regulatory methods that can be used to assist Council in achieving the necessary ambient air quality targets.
71. These include education, financial assistance and financial incentives and are discussed in more detail below.

### ***Financial Assistance / Incentives***

72. There is potentially a need for Council to provide financial assistance and incentives to households who are converting from open fire and solid fuel burner use.
73. Similar financial assistance schemes have been implemented by other councils, these schemes are outlined in Appendix 2.
74. There are several ways financial assistance could be provided to households; these are discussed in more detail below.
  - 74.1. Provide means-tested financial assistance in the form of a full subsidy to households that cannot afford to make the mandatory change from open fires and solid fuel burners to cleaner heating, and are therefore very likely to experience cold homes as a result.
  - 74.2. Provision of interest free loans up to the value of \$4,000 to all households up to the date of the burner phase out. This money could be used for insulation, clean heating alternatives, pellet fires or gas flue heaters. This money would be repayable to Council on sale of the house or via a targeted rate, over say the next ten years.
  - 74.3. Any financial assistance and incentive programmes offered by the Council should expire the same date that the burner is phased out. This will encourage people to convert their heating prior to enforcement action being taken.
75. It is suggested that the Council undertake a Section 32A analysis prior to determining how much money, if any, should be made available to households.

### ***Communications and Marketing***

76. Information and education is necessary to explain the health consequences of continuing the present level of PM<sub>10</sub> discharges and forecasting benefits of change to ensure community support for the change.
77. It is suggested that a variety of campaigns could be used in Hastings and Napier to raise awareness and encourage voluntary reduction of emissions from solid fuel burning.
78. These campaigns could range from the preparation and distribution of pamphlets, fact sheets and posters to full scale television, newspaper and radio advertisements.
79. Any education campaigns will need to focus on increasing awareness of air quality issues, and help members of the community understand the need for subsequent regulatory and compliance measures that may result.
80. The following key messages should be emphasised in any future marketing campaign the Council undertakes:
  - 80.1. Promotion of a future positive, constructive understanding of the current air quality issue, and its effects within the region. For example let people know there is an air quality problem and they have an important role to play
  - 80.2. Changing behaviour, educate people on how they can run their wood burners more efficiently
  - 80.3. Information and interpretation about the regulations, the requirements for compliance including timeframes and implementation information
  - 80.4. Encouraging heating upgrades with efficient non-burning heat forms, together with energy efficiency measures and home heating practises. Educate people so they know that quality ventilation is essential for a healthy home.
  - 80.5. The different types of financial assistance available to households from various agencies including who is eligible.
81. The communications and marketing campaign should focus primarily on the population within the Napier and Hastings airsheds. The following information needs to be marketed specifically towards the different target groups outlined below:
  - 81.1. Residents: specific, accurate information about new heating appliances, cost comparisons, and the suitability for homes, ease and comfort. Information about home insulation and heating, how to efficiently utilise/operate existing structures and appliances is also important.
  - 81.2. Manufacturers/vendors/installers of new heating appliances: proactive approach to avoid the dumping of 'dirty' appliances cheaply on the market; this sector can assist consumers to make the right decisions for the long term
  - 81.3. Wood/timber merchants: focus on early winter preparation and dry wood sales, with treated timber educations
  - 81.4. Architects/building specifiers: reinforce alternative approaches; passive heating, solar power.

### **Conclusion**

82. There are both positive and negative impacts expected to result from any future policy brought in by the Council.
83. The positive impacts relate directly to improved health, reduced medical/hospital costs, fewer restricted activity days, and less nuisance effects.

84. Potential negative effects relate to continued mortality, increased hospital admissions, and more activity restricted days from poor air quality.
85. There are also potential negative impacts that could result from the financial expense associated with the installation and possible running of the new heating appliance. A number of households may not be able to afford to upgrade their heating systems which would lead to inadequate warmth in their homes, resulting in increased health problems; in addition people living in rental homes may miss out on upgraded heating systems due to landlord resistance.
86. There are also potential implications resulting from power supply interruptions for those who change to clean heating which is solely powered by electricity.
87. While there is a pressing need to significantly reduce the level of emissions within the Hastings and Napier airsheds, any policies introduced in relation to PM<sub>10</sub> must take into account the negative and positive effects talked about above.
88. Council's approach must be sensitive to the fact that the majority of the households using wood burners tend to be located within in the older and lower socio-economic parts of Napier and Hastings.
89. The provision of financial assistance or incentives for the replacement of heating methods can minimise socio-economic impacts and can be used to encourage conversion to non solid fuel alternatives.
90. It is recommended that any incentive and financial assistance programs be accompanied by appropriate communications and marketing to provide information about the current air quality in Napier and Hastings, and a history of the NESAQ including the repercussions for the community if the NESAQ for PM<sub>10</sub> is not met by 2013; information should also be provided outlining the new rules and associated guidance, and the penalties that will occur as a result of non compliance.
91. Sean Bevin's social impact assessment recommends that Council considers a funding approach similar to what has occurred in the Nelson and Canterbury regions.
92. The funding approaches adopted by several other councils are discussed in more detail in Appendix 2. Any funding approach should provide flexibility to encourage the maximum uptake by households of compliant wood burners, and/or clean household heating systems.
93. The cost of replacement is substantial, with the cost of total wood burner replacement in Hawke's Bay likely to be at least \$40 million<sup>1</sup>.

#### **Staff views**

94. In order to achieve the NES for PM<sub>10</sub> by 2013, it is necessary that the following regulatory measures be adopted by Council sooner rather than later:
  - 94.1. In the Napier and Hastings airsheds, introduction of emission and efficiency standards for new burners; requiring compulsory replacement of old burners or burners which do not meet the new standard by 2013 at the latest
  - 94.2. In the Napier and Hastings airsheds, phasing out the use of open fires by 1 January 2011
  - 94.3. In the Hastings airshed, prohibit the installation of solid fuel burners (except pellet burners which meet a particulate emission standard of 0.8 g/kg) in new homes,

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<sup>1</sup> This is a rough estimate based on the total number of burners in Napier and Hastings (8,800 +10,900) x \$2,000 (approximate cost of a burner). This cost does not take into account house insulation, which will be an additional cost.

and/or in existing homes where a solid fuel burner is not the main source of heating

94.4. Require a resource consent to undertake outside burning during the months of May through to August inclusive, outside these months outdoor burning is permitted subject to conditions. This would allow, for example:

- An orchardist to apply for resource consent to undertake outdoor burning to clear up prunings, or old trees within the Hastings or Napier airsheds during the winter months. If granted, the consent would be subject to conditions on the duration of burning, the dryness of the fuel and suitable meteorological conditions.

95. There is a range of additional elective methods available to assist Council to achieve the NESAQ target for PM<sub>10</sub> by 2013. As mentioned earlier a stringent regulatory approach could work together with effective enforcement rules.

96. Additional information about each of the following measures still needs to be presented with appropriate recommendations to Council:

96.1. Funding of a financial assistance programme so as to provide interest free loans up to the value of say \$4,000 for house insulation and the installation of an approved clean heating appliance. This could be combined with funding available from the Energy Efficiency Conservation Authority. It is recommended that the financial assistance programmes only be available up until the burner and open fire phase out dates, with this money being repayable to the Council upon sale of the house, or as a targeted rate over the next ten years.

96.2. Raising public awareness and providing information promoting:

- Energy efficiency measures, such as homes being well insulated and draught proof
- Good operation and maintenance of domestic solid fuel burners, including the virtues of dry wood
- Choice of correct size of burner, making sure the burner is not too big for the home
- Air quality benefits from replacement with non-solid fuel heating
- Benefits of early replacement of open fires and existing burners (e.g. eligibility for financial assistance before phase outdate)
- How and when outdoor burning should take place, e.g. stockpiling of wood, or vegetation until it is dry before burning, avoiding burning during winter months, or on calm clear cold days when it is likely an inversion layer exists.

96.3. Enforcement measures including:

- One warning given to households who are caught using non-complying wood burners. Repeat offenders will receive an instant fine (currently \$300 under the RMA).
- Cross referencing with the territorial authority records to show which households have old wood burners, and which households have recently installed new wood burners. Those houses which have no records of a new wood burner being installed may be targeted by enforcement officers and education incentives.
- Education booklets will be sent to those households who have complaints laid against them for smokey chimneys.

## **Draft Plan Change Provisions**

97. Details of the draft plan change provisions are included in Attachment 1.
98. They include additional policies and rules in the Regional Resource Management Plan.

## **DECISION-MAKING PROCESS**

99. Council is required to make a decision in accordance with Part 6 Sub-Part 1, of the Local Government Act 2002 (the Act). Staff have assessed the requirements contained within this section of the Act in relation to this item and have concluded the following:
  - 99.1. Sections 97 and 98 of the Act do not apply as these relate to decisions that significantly alter the service provision or affect a strategic asset.
  - 99.2. Sections 83 and 84 covering special consultative procedure do not apply as Council has already consulted through the Annual Plan/LTCCP processes on this issue although not in detail.
  - 99.3. The decision does not fall within the definition of the Council's policy on significance.
  - 99.4. Section 80 of the Act covering decisions that are inconsistent with an existing policy or plan does not apply.
  - 99.5. Council can exercise its discretion under Section 79(1)(a) and 82(3) of the Act and make a decision on this issue without conferring directly with the community or others having given due consideration to the nature and significance of the issue to be considered and decided, and also the persons likely to be effected by or have an interest in the decisions to be made and recognising that there are formal submissions and hearing processes provided under the Resource Management Act 1991 which enable people affected to be consulted and have their say.

## **RECOMMENDATIONS**

1. That the Committee recommends Council:
  - 1.1. Agree that the decisions to be made are not significant under the criteria contained in Council's adopted policy on significance and that Council can make decisions on this issue as it has conferred directly with the community and persons likely to be affected by or to have an interest in the decision due to the nature and significance of the issue to be considered and decided.
  - 1.2. In order to achieve the NES for PM<sub>10</sub> by 2013, adopt the following regulatory measures:
    - 1.2.1. In the Napier and Hastings airsheds, introduction of emission and efficiency standards for new burners; requiring a compulsory replacement of old burners or burners which do not meet the new standard by 2013
    - 1.2.2. In the Napier and Hastings airsheds, phasing out the use of open fires by 1 January 2011.
    - 1.2.3. In the Hastings airshed prohibit the installation of solid fuel burners (except pellet burners which meet a particulate emission standard of 0.8 g/kg) in new homes, and/or in existing homes where a solid fuel burner is not the main source of heating.

- 1.2.4. Require resource consent to undertake outside burning during the months of May through to August inclusive, outside these months outdoor burning is permitted subject to conditions.

**Belinda Riley**  
**SENIOR PLANNER**

**Liz Lambert**  
**MANAGER POLICY**

**Murray Buchanan**  
**GROUP MANAGER**  
**ENVIRONMENTAL MANAGEMENT**

ENCL: **APPENDIX 1: DEFINITIONS**  
**APPENDIX 2: WHAT OTHER COUNCILS HAVE DONE**  
**ATTACHMENT 1 – DRAFT PLAN CHANGE PROVISIONS**  
**ATTACHMENT 2 – SUMMARY OF RULES**

## APPENDIX 1: DEFINITIONS

### Airshed:

- a) the region of a regional council excluding any area specified in a notice under paragraph b),
- b) a part of the region of a regional council specified by the Minister for the Environment by notice in the Gazette to be a separate airshed.

(from Resource Management (National Environmental Standards Relating to Certain Air Pollutants, Dioxins, and Other Toxics) Amendment Regulations 2004).

Boundaries of the Hawke's Bay region's gazetted as per (b) above, are shown in schedule XIV.

**Existing industrial or trade premise:** Industries in the Napier or Hastings airsheds that have a resource consent at the date of notification of the variation to the Hawke's Bay Regional Resource Management Plan Air Plan (insert date), and that for the period between 1 September 2013 to 1 September 2018 there is no expansion greater than a maximum heat output of 5 MW of LPG and natural gas. Expansion beyond the consented maximum heat output is not allowed for industries that use a fuel type other than LPG or natural gas'.

**Greater region airshed:** covers those parts of the region which have not been specifically gazetted by the Hawke's Bay Regional Council.

**Hastings airshed:** The area specifically gazetted over the Hastings urban area for the purposes of managing local ambient air quality, this area is identified in Schedule XIV.

**Incinerator:** A device that is capable of burning solid fuel and waste, but the combustion is not able to be controlled and is not totally enclosed.

**Multifuel burner:** means an appliance designed to burn more than one type of solid fuel.

**Napier airshed:** The area specifically gazetted over the Napier urban area for the purposes of managing local ambient air quality, this area is identified in Schedule XIV.

**National Ambient Air Quality Standard:** means a standard specified under the Resource Management (National Environmental Standards Relating to Certain Air Pollutants, Dioxins, and Other Toxics) Regulations 2004.

**NESQA compliant burning appliance:** A small scale solid fuel burning appliance that meets the standards in Schedule XII, and is specifically stated on the approved burner list which will be provided on request by the Hawke's Bay Regional Council.

**Open fire:** includes any small-scale fuel burning device or construction installed in or attached to any building that is capable of burning solid fuel, but the combustion is not totally enclosed.

**Outdoor burning:** means the combustion of any material in the open air, other than in purpose-built fuel burning equipment designed to control the combustion process. Outdoor burning includes the use of any fire, or bonfire or burning in drums and backyard rubbish incinerators, but excludes the burning of fuels in hangi and barbeques for food cooking purposes.

**Note:** the NESAQ overrides any rules within the RRMP and prohibits the burning of certain materials in the open.

**Particulates:** includes smoke, deposited particulates, suspended particulates, respirable particulates and visibility – reducing particulates. Particles range in size from 100 microns down to aggregations of molecules.

**Pellet burner:** means any small-scale solid fuel burning appliance that burns pellets of compressed wood sawdust, and where the pellets and air are mechanically delivered to an enclosed combustion chamber at a controlled rate. ‘Pellet burner’ and ‘pellet fire’ have the same meaning.

**PM<sub>10</sub> :** Particulate matter that is less than 10 microns in aerodynamic diameter.

**Small-scale fuel burning appliance:** any appliance which burns: solid fuel, diesel, oil or other liquid fuels for cooking, space or water heating or other purposes, where the net heat output from the combustion is not greater than 70 kilowatts (kW) for any gaseous or liquefied gaseous fuel, or not greater than 40 kW for any other fuel.

**Small-scale solid fuel burning appliance:** a combustion appliance, with a heat generation of up to 40 kilowatts (kW), in which solid fuel is burnt for heating or cooking, and is primarily used in residential dwellings. It includes (but is not limited to) appliances for interior space heating in buildings, such as wood burners, pellet burners, pot belly and domestic ranges and stoves, water heaters or central heating units, multi-fuel (coal/wood and waste burning systems), and similar appliances, but excludes small-scale domestic devices for smoking food. A small-scale solid fuel burning appliance does not include any incinerator or open fire as defined in this glossary.

**Solid fuel:** means a solid substance that releases useable energy when burnt (e.g. coal and wood).

**Thermal efficiency:** Ratio of useable heat energy output to energy input.

**Vegetative matter:** includes but is not limited to; stalks and stubble (stems), leaves, and seed pods, prunings, wood.

**Wood burner:** means a domestic heating appliance that burns wood, but does not include:

- (a) an open fire
- (b) a multi-fuel heater, a pellet heater, or a coal burning heater
- (c) a stove that is designed and used for cooking and is heated by burning wood.

## **APPENDIX 2: WHAT OTHER COUNCILS HAVE DONE**

### **Nelson City Council (Unitary Authority)**

Nelson City Council has undertaken a significant amount of air quality work and has introduced a range of measures including regulations, incentives and education in order to address their air pollution problem, and meet the NESAQ for PM<sub>10</sub> by 2013. The Nelson City Council adopted the new air plan provisions in September 2005. No appeals were lodged with the Environment Court.

A summary of the measures that Nelson City Council has introduced is summarised below:

#### ***Regulations***

- Banning the use of open fires in homes from 1 January 2008.
- Mandatory phase-out of all small scale solid fuel burning appliances by 1 January 2013 which do not have a design criteria the same or less than NESAQ compliant burners.
- The use of fuels for solid fuel burners is regulated including the prohibition of burning wood with a moisture content of more than 25%.
- No new solid fuel burners, except for very low emitting pellet fires (0.8g/kg) are allowed in new homes, or homes that did not have a solid fuel appliance prior to notification of their plan.
- Outdoor burning of household or garden waste is prohibited in residential areas on properties less than 2 hectares in size, all year round, and on residential properties over 2 hectares in size during the months May to August inclusive.
- Outdoor burning in the rural zone is permitted subject to activity standards, e.g. no burning without resource consent of more than 2 cubic metres of material within the semi rural boundary, unless the burning is being carried out to manage spread of disease.

#### ***Incentives***

Nelson City Council has introduced an incentive scheme known as the Clean Heat – Warm Homes programme that targeted low income homeowners, and landlords, with open fires or older wood burners to mitigate any financial implications from the introduction of the above regulations. The following subsidies and incentives are available to households who have a burner that is being phased out by the Council's Air Quality Plan. Interest free loans, and subsidies are only available up until the date that particular burner is phased out.

- An interest free loan repayable over a ten year period as a targeted rate within the overall rates bill it is available for landlords as well as homeowners. The interest free loan has a \$5,000 cap.
- Full subsidy for low income earners who are eligible for the government's rates rebate scheme. These homeowners are not required to pay the targeted rate for as long as they received the rebate.
- All homeowners who have a burner that is being phased out by the Council's Air Quality Plan are eligible for financial assistance for the upgrading of their domestic heating systems including insulation.
- In 2004 the Council started up an open fire scheme. Under this scheme the Council paid 100% of the cost of replacement heating (including making the fire unusable) and whole house insulation for households that had a community services card, and 50% to a landlord if their tenant had a community services card. Nelson City Council

stopped this scheme and brought in the interest free loan scheme as a way of making a fixed amount of money go further, and to help a wider range of people.

### **Total costs**

The total costs of Nelson City Council's Clean Heat, Warm Homes programme for the period between 2007 – 2016 is approximately \$16 million. This figure includes a total household heating upgrade cost of \$10.5 million and is based on approximately 2,500 new burners required with an average loan repayment impact of \$4,200. This total cost figure includes properties eligible for the rates rebates whose heating upgrade costs (estimated \$1.6 million in total) will be fully met by the Nelson City Council. An additional net outlay cost of \$5.5 million covering the cost of administering the Clean Heat, Warm Homes programme (including assessment, education and enforcement), and partial subsidisation of the interest free loan arrangement (EECA contributes to the remaining part of the interest element). The contributions of the household (polluter) and community (beneficiary) sectors is approximately 60% and 40%, respectively.

### **Environment Canterbury**

Environment Canterbury has introduced a combination of regulations, incentives and education measures in order to combat air pollution in the region and meet the NESAQ for PM<sub>10</sub> by 2013. Environment Canterbury adopted the new air plan provisions in September 2007. Appeals are currently being heard at Environment Court.

A summary of the measures that Environment Canterbury has introduced is summarised below.

#### **Regulations**

- Banning the use of open fires in homes from 1 January 2008.
- Banning the installation of open fires and solid fuel appliances in new homes, or homes that have not previously had a small scale solid fuel burning device within the Christchurch Clean Air Zone 1.
- From 1 January 2008 wood burners that are over 15 years are not able to be used. They can be replaced with a cleaner form of heating including low emission burners.
- Outdoor burning of standing crop residue or vegetative stubble needs resource consent to be undertaken during the months of May to August, otherwise the activity is permitted.
- Outdoor burning of vegetation, paper, cardboard and untreated wood in a residential area is a discretionary activity if it occurs within a residential area, or during the months of May to August, otherwise the activity is permitted.

#### **Incentives**

Environment Canterbury has introduced an incentive scheme known as the Clean Heat Project designed to assist with the movement to clean heat in the region. The following subsidies and incentives are available to homeowners who are located within the Clean Air Zone, and have an open fire, or solid fuel burner which is currently being used as the main form of heating. Houses that are government-owned, such as by the Housing New Zealand Corporation or the Christchurch City Council, are not eligible for a Clean Heat Project grant from Environment Canterbury. The Clean Heat Project stops in 2013.

- Full subsidy for homeowners who hold a community services card to cover the cost of the conversion including house insulation, removal or sealing of an existing solid fuel burner or fireplace, and the provision and installation of a heating appliance approved by Environment Canterbury.

- Interest free loan payable back over a ten year period as a targeted rate within the overall rates bill; it is available for landlords as well as homeowners. The interest free loan has a \$4,200 cap; or a subsidy of \$3.50 m<sup>2</sup> of floor area, towards house insulation and \$500 towards a clean heating alternative approved by Environment Canterbury or, \$300 towards an electric night storage appliance and \$100 towards the sealing or removal of an existing fireplace or the purchase of an ultra low emission solid fuel appliance.
- Landlord subsidy of 40% of the total conversion cost to clean heating.

### **Total costs**

The total cost of Environment Canterbury's clean heat programme for the period between 2002 and 2013 is \$60 million. This figure includes \$10.5 million to cover the cost of administering the programme and \$49.5 million to cover the cost of 26,400 conversions. These conversions are split up into 12,300 subsidies and interest free loan programmes, 8,700 full assistance programmes, and 5,400 rental programmes.

Environment Canterbury has also run education campaigns targeting increased awareness of the sources of pollution. Recently education campaigns have focused on the promotion of the Clean Heat project including newspaper, radio and web based marketing strategies.

### **Otago Regional Council**

The Otago Regional Council has focused mainly on using regulation to achieve their targets, however an incentive scheme and education scheme has also been undertaken with ECCA to encourage people to take up cleaner forms of heating.

The Otago Regional Council adopted their new air plan provisions in December 2007. Appeals are currently being heard at the Environment Court. A summary of the measures that the Otago Regional Council has introduced is summarised below.

### **Regulations**

- Mandatory phase-out of existing domestic heating appliances located in Air Zone 1, by 1 January 2012, which do not have a design criteria the same or less than NESAQ compliant burners. These burners can be replaced with NESAQ compliant burners.
- The discharge of contaminants into air from any domestic heating appliance, located in Airzone 1, which was not lawfully installed before April 2007, (January 2009 – Clyde) must meet a particulate emission rate of 0.7 g/kg.
- Outdoor burning on residential properties, located in Air Zone 1, is a permitted activities subject to burning being undertaken at least 50 metres from the boundary of the property.
- Outdoor burning on non residential properties, located in Air Zone 1, is a permitted activity subject to burning being undertaken at least 100 metres from the boundary of the property.

### **Incentives**

Otago Regional Council has introduced a scheme known as the Clean Heat – Clean Air assistance programme designed to assist with the movement to clean heat in the region. This programme, has been undertaken together with the Energy Efficiency Conservation Authority, and local community trusts. The following subsidies and incentives are available to homeowners who fit the following criteria until 2009:

- Provision of ceiling, underfloor and hot water cylinder insulation for \$300 for homeowners who hold a community services card, own a house built before 1978, and the house is inadequately insulated.

- Financial assistance of up to \$2,000 towards an approved ORC heating appliance for home owners who own and occupy a house built prior to 1978, the house is insulated effectively, and the primary heating appliance is a burner which does not meet the Otago Regional Council's air rules. Community service card holders pay no more than \$300 towards this scheme.
- Financial assistance up to \$2,000 towards an ORC approved heating appliance for homeowners, who have an adequately insulated house, and whose primary heating appliance is the cause of a neighbour's health condition (recognised by a registered medical practitioner), or for people who have a health condition directed related to air pollution (recognised by a registered medical practitioner).
- Interest free loan of up to \$2,000 for landlords whose properties are adequately insulated. The landlord must repay the loan within 2 years and extend the current tenancy at the same rent level for at least 6 months. Landlords who have properties that are inadequately insulated can apply for assistance with the cost of insulation providing they pay 30% of the cost.

### **Total costs**

The Otago Regional Council has committed to providing \$400,000 towards the project until 2009, plus the additional costs associated with administering the scheme. Depending on the success of the scheme more money may be available in 2009. Other money for ORC's Clean Heat – Clean Air project has come from community trusts and ECCA.

### **Central Government Initiatives**

There are a range of programmes and financial incentives being provided by Central Government which need to be taken into account in any approach that the Council uses to address PM<sub>10</sub>. The initiatives provide a clear link between the benefits of improving air quality and warming up homes.

The government established an Energy Efficiency and Conservation Authority (EECA) mid 2000. This authority promotes a sustainable energy future and has an Energy Wise funding programme which funds improvements to insulation, and other energy saving measures in homes throughout New Zealand. EECA directly administers the grants to home owners who have a community services card and a house built before 1978. Meeting this criteria does not automatically mean homeowners qualify for the scheme, there is limited funding available and people who live in decile 9 and 10 areas (determined by the department of health), and have a occupier who is over 65, or a respiratory illness will get priority. Currently EECA have enough funding to undertake energy efficient improvements in over 200 homes in Hawke's Bay.

ECCA also provides an interest free subsidy up to \$1,400 for households which annually earn under \$100,000 (2 occupants), or \$140,000 (3 occupants). It is noted that funding is not provided to Housing New Zealand tenants, as currently Housing New Zealand is upgrading their properties in certain areas of the country (e.g. Christchurch and Nelson). Further consultation needs to be undertaken with Housing New Zealand to ascertain if and when they will be upgrading their homes in Hawke's Bay.

## 6.4 DISCHARGES TO AIR

### 6.5.1 COMBUSTION OF FUEL - DISCHARGES TO AIR

Rule	Activity	Classification	Conditions/Standards/Terms	Matters for Control/Discretion	Non-notification
<p>17</p> <p><b>Combustion of specified fuels</b></p> <p><i>Refer POL 69</i></p>	<p>The discharge of any contaminant into air from any industrial or trade premises or any other source, excluding any moveable source and any dwellinghouse<sup>36</sup>, arising from the combustion of:</p> <ul style="list-style-type: none"> <li>Natural or liquefied petroleum gas; and/or</li> <li>Coal, oil (excluding waste oil) or untreated wood.</li> </ul>	<p><b>Permitted</b></p>	<p>a. The total rate of heat released during the combustion process (measured on an LHV<sup>37</sup> basis) for any particular emission source:</p> <ol style="list-style-type: none"> <li>5 MW for natural or liquefied petroleum gas, or</li> <li>100kw for coal, oil, or untreated wood, or</li> <li>where gas and coal, oil or untreated wood is used, the cumulative discharge does not exceed the equivalent of 100 kW of coal, oil, or untreated wood being burnt.</li> </ol> <p>b. The fuel shall be burned using fuel burning equipment, and the discharge shall be from a chimney or exhaust structure designed so that the emission is effectively dispersed upwards.</p> <p>c. The discharge shall not result in any smoke that adversely affects traffic safety, or reduces visibility within 5 m of ground level beyond the boundary of the subject property or on any public land.</p> <p>d. The discharge shall not result in any objectionable deposition of particulate matter on any land or structure beyond the boundary of the subject property, or on public land.</p> <p>e. The discharge shall not result in any offensive or objectionable odour, or any noxious or dangerous levels of gases, beyond the boundary of the subject property or on public land.</p> <p>f. <u>The fuel shall not comprise any of the waste materials specified in the activity description of Rule 20.</u></p>		

<sup>36</sup> Discharges of contaminants into air arising from the combustion of fuels in moveable sources (including motor vehicles and aircraft), and dwelling houses, are not regulated by this Plan and therefore do not require resource consents (excluding moveable asphalt plants and road burners which are regulated under section 6.5.5).

<sup>37</sup> The Heating Value of a fuel is the amount of heat produced from the complete combustion of a unit of fuel. The Higher (or gross) Heating Value is that when all products of combustion are cooled to the pre-combustion temperature, water vapour formed during combustion is condensed, and necessary corrections have been made. Lower (or net) Heating Value (LHV) is obtained by subtracting from the gross heating value the latent heat of vaporisation of the water vapour formed by the combustion of the hydrogen in the fuel.

Rule	Activity	Classification	Conditions/Standards/Terms	Matters for Control/Discretion	Non-notification
<p>18</p> <p>Combustion of specified fuels</p> <p>Refer POL 8, 69</p>	<p><u>Except as provided for by Rules 17 and 18a,</u></p> <p>The discharge of any contaminant into air from any industrial or trade premises or any other source, excluding any moveable source and any dwellinghouse, arising from the combustion of:</p> <ul style="list-style-type: none"> <li>natural or liquefied petroleum gas, or</li> <li>coal, oil (or untreated wood)</li> </ul> <p><u>except as provided for by Rule 17.</u></p>	Controlled	<p>a. The total rate of heat released during the combustion process (measured on an LHV<sup>37</sup> basis) for any particular emissions source:</p> <ol style="list-style-type: none"> <li>50 MW for natural or liquefied petroleum gas, or</li> <li>10 MW for coal, oil or untreated wood,</li> <li>where gas and coal, oil or untreated wood is used, the cumulative discharge does not exceed the equivalent of 10 MW of coal, oil or untreated wood being burnt.</li> </ol> <p>b. The fuel shall be burned using fuel burning equipment, and the discharge shall be from a chimney designed so that:</p> <ol style="list-style-type: none"> <li>the discharge is effectively dispersed upwards</li> <li>the minimum efflux is 10 m/s at the chimney exit at full load for sources up to 10 MW capacity, and 15 m/s for sources greater than 10 MW capacity.</li> </ol> <p>c. <u>The fuel shall not comprise any of the waste materials specified in the activity description of Rule 20.</u></p> <p><u>Any combustion of waste oil shall take place only in equipment specifically designed and certified for the purpose.</u></p> <p>d. The opacity of the discharge when measured at the point of entry to the atmosphere shall not exceed 20%, except that a discharge in excess of this shall be allowed for a period of not more than 2 minutes continuously or for an aggregate of 4 minutes in any 60 minute period.</p> <p>e. The discharge shall not result in any objectionable deposition of particulate matter on any land or structure beyond the boundary of the subject property, or on public land.</p> <p>f. The discharge shall not result in any offensive or objectionable odour, or any noxious or dangerous levels of gases, beyond the boundary of the subject property or on public land.</p> <p>g. The discharge shall not result in any smoke that adversely affects traffic safety or reduces visibility within a height of 5 m above ground level at any point beyond the boundary of the subject property.</p>	<p>a. <u>Methods used to disperse contaminants, including chimney height, chimney design and emission velocity.</u> Chimney height, <del>which</del> will be determined generally in accordance with Schedule IX.</p> <p>b. Duration of consent.</p> <p>c. Lapsing of consent.</p> <p>d. Review of consent conditions.</p> <p>e. Compliance monitoring</p> <p>f. <u>Contaminant emission limits</u></p> <p>g. <u>Any measures necessary to ensure maintenance of fuel burning equipment, the carrying out of measurements, samples, analysis, surveys, investigations or inspections including, the monitoring of: contaminant concentrations and emission rates: the opacity of the discharge, quantity of fuel used, the cumulative effects of the discharge in combination with discharges from other sources, and the provision of information to the consent authority at specified times.</u></p> <p>h. Administrative charges.</p> <p>i. Effects on flight paths.</p> <p>j. <u>New technologies available to minimise any discharges or their effects.</u></p>	<p>Applications will generally be considered without notification, without the need to obtain the written approval of affected persons.</p>

<p><u>18a</u> <u>The discharge of PM<sub>10</sub> to air from the combustion of specified fuels – existing industrial or trade premises located in the Napier and Hastings airsheds (from 1 September 2013 to 1 September 2018)</u></p>	<p><u>From 1 September 2013 to 1 September 2018 the discharge of PM<sub>10</sub> into air from any existing industrial or trade premises* located in the Napier or Hastings airsheds* arising from the combustion of:</u></p> <ul style="list-style-type: none"> <li><u>Liquefied petroleum gas or natural gas; diesel and kerosene; tallow, light fuel oil, heavy fuel oil; or coal, or untreated wood</u></li> </ul>	<p><u>Permitted</u></p>	<p>a. <u>Existing stack heights are maintained.</u></p> <p>b. <u>The discharge to air from the combustion of liquefied petroleum gas, compressed natural gas; diesel and kerosene; tallow, light fuel oil, heavy fuel oil or coal, or untreated wood shall not exceed a PM<sub>10</sub> concentration of 250 milligrams per cubic metre of air (expressed at 0°C and on a dry gas basis, standardised to 12% CO<sub>2</sub>)</u></p> <p>c. <u>For all fuel types, the fuel burning equipment is maintained in accordance with the manufacturer's specifications at least once every year by a person competent in the maintenance of that equipment. This maintenance must include adjustment, if necessary, of the fuel to air ratio and testing of the ratio of combustion gases (carbon monoxide, carbon dioxide and oxygen) discharged, and a copy of each maintenance report is held and made available on request to Hawke's Bay Regional Council.</u></p> <p>d. <u>Except for a period not exceeding two minutes in each hour of operation, the opacity of the discharge at the chimney exit is not darker than Ringelmann Shade No. 1, as described in New Zealand Standard 5201:1973, and,</u></p> <p>e. <u>For light fuel oil, heavy fuel oil, coal or untreated wood in combustion appliances of less than 1 MW maximum heat output emissions testing to determine the concentration of PM<sub>10</sub> from any boilers and or burners on the site shall be undertaken every five years. Emission testing shall be carried out when the boiler and/or burner is running at maximum capacity, using the most up to date method. The results of these tests shall be forwarded to the Hawke's bay Regional Council (Manager: Regulation) within one month of the results being undertaken.</u></p> <p>f. <u>For light fuel oil, heavy fuel oil coal or untreated wood in combustion appliances greater than 1 MW maximum heat output emissions testing to determine the concentration of PM<sub>10</sub> from any boilers and or burners on the site shall be undertaken every two years. Emission testing shall be carried out when the boiler and/or burner is running at maximum capacity, using the most up to date method. The results of these tests shall be forwarded to the Hawke's bay Regional Council (Manager: Regulation) within one month of the results being undertaken.</u></p> <p>g. <u>The discharge shall not result in any smoke that adversely affects traffic safety, or reduces visibility within 5 m of ground level beyond the boundary of the subject property or on any public land.</u></p>			
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			<p>h. <u>The discharge shall not result in any objectionable deposition of particulate matter on any land or structure beyond the boundary of the subject property, or on public land.</u></p> <p>i. <u>The discharge shall not result in any offensive or objectionable odour, or any noxious or dangerous levels of gases, beyond the boundary of the subject property or on public land.</u></p> <p>j. <u>The fuel shall not comprise any of the waste materials specified in the activity description of Rule 20</u></p>			
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**6.5.1A DOMESTIC: SMALL SCALE FUEL BURNING DEVICES - DISCHARGES TO AIR**

<u>18b</u> <u>Discharge to air from open fires</u>	<u>Except as provided for by Rule 18f, the discharge of contaminant to air from a building located within the Hastings or Napier airsheds* from the burning of any solid fuel in any open fire from 1 January 2011.</u>	<u>Prohibited</u>				
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<p><b>18c</b> discharge to air from any small scale pellet burning appliance – Hastings Airshed</p>	<p>The discharge of contaminants to air from a small scale pellet burning appliance in:  any new building, or any building that did not have a small scale fuel burning device at 30 April 2009, including extension or alteration to the building; and  Within the Hastings airshed*</p>	<p>Permitted</p>	<p>a. <u>The pellet burning appliance must comply with the requirements in Schedule XII</u></p> <p>b. <u>The discharge must not result in effects at or beyond the boundary of the site that are noxious or dangerous, offensive or objectionable.</u></p> <p>c. <u>Contaminants discharged may only be derived from combustion of fuel authorised or approved for use in the device.</u></p>			
<p><b>18d</b> discharge to air from any small scale solid fuel burning appliance - Napier &amp; Hastings's Airsheds</p>	<p>The discharge of contaminants to air from small scale fuel burning appliances in a building located:  within the Hastings airshed*, and being installed to specifically replace a small scale fuel burning device installed before 30 April 2009, or  within the Napier airshed*</p>	<p>Permitted</p>	<p>a. <u>The solid fuel burning appliance must comply with the requirements in Schedule XIII.</u></p> <p>b. <u>The discharge must not result in effects at or beyond the boundary of the site that are noxious or dangerous, offensive or objectionable.</u></p> <p>c. <u>Contaminants discharged may only be derived from combustion of fuel authorised or approved for use in the device.</u></p>			

<p><b>18e</b> discharge to air from any small scale solid fuel burning appliance - greater region airshed</p>	<p>The discharge of contaminants into air from any small scale solid fuel burning appliance in a building located in the greater region airshed*</p>	<p><u>Permitted</u></p>	<p>a. Any wood burner installed after 1 September 2005, or any domestic heating appliance installed after 30 April 2009, in a building on a property with an allotment size of less than 2 hectares, must comply with the requirements in Schedule XIII.</p> <p>b. The discharge must not result in effects at or beyond the boundary of the site that are noxious or dangerous, offensive or objectionable.</p>			
<p><b>18f</b> discharge to air from any small scale solid fuel burning appliance - registered historic building</p>	<p>The discharge of contaminants into air from the burning of fuel in any existing enclosed burner or open fire that is located within a registered historic building. <sup>1b</sup></p>	<p><u>Permitted</u></p>	<p>a. The domestic heating appliance contributes to the significance of the registered historic place.</p> <p>b. Any wood burner installed after 1 September 2005, or any domestic heating appliance installed after 30 April 2009, in a building on a property with an allotment size of less than 2 hectares, must comply with the requirements in Schedule XIII.</p> <p>c. The discharge must not result in effects at or beyond the boundary of the site that are noxious or dangerous, offensive or objectionable.</p>			
<p><b>18g</b> discharge to air from any small scale solid fuel burning appliance installed prior to 30 April 2009</p>	<p><u>Except as provided for by Rules 18c and 18d, the discharge of contaminants onto air from any small scale fuel burning appliances in a building located in the Napier and Hastings airsheds is prohibited from the following dates:</u></p> <ul style="list-style-type: none"> <li>• Solid fuel burners installed prior to 31 December 1995 are prohibited from use after 1 January 2011;</li> </ul>	<p><u>Prohibited</u></p>				

	<ul style="list-style-type: none"> <li>• <u>Solid fuel burners installed between 1 January 1996 and 31 August 2005 are prohibited from use after 1 January 2012.</u></li> <li>• <u>Solid fuel burners installed after 1 September 2005 that do not comply with the requirements in Schedule XIII are prohibited from use after 1 January 2013.</u></li> </ul>				
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**ADVISORY NOTES:**

- 1. Non-compliance with rules** – If Rules 17, ~~and~~ 18, 18c, cannot be complied with, then the activity is a restricted discretionary activity under Rule 30. If Rule 18d cannot be complied with then the activity is prohibited under Rule 18g.
  - 1a. Rule 17 includes the discharge of contaminants into air from any small scale solid fuel appliance and open fires on industrial or trade premises where the small scale solid fuel appliance or open fire is used exclusively for the smoking or cooling of food for wholesale or retail sale.
  - 1b. For the purposes of Rule 18f registered historic buildings are buildings that are specified on the Historic Places Register and/or District Plan.
- 2. Emission rates** - Schedule IX sets out estimated emission rates of contaminants from the activities provided for by Rules 17 and 18.

## 6.5.2 BURNING OF WASTE - DISCHARGES TO AIR

Rule	Activity	Classification	Conditions/Standards/Terms	Matters for Control/Discretion	Non-notification
<p>19</p> <p><b>Burning of waste</b></p> <p><i>Refer POL 69</i></p>	<p>The discharge of contaminants into air arising from the burning of waste.<sup>38</sup></p>	<p><b>Permitted</b></p>	<p>a. The waste shall have been generated on the same property, or on another property under the same ownership, as that used for combustion, except for:</p> <ul style="list-style-type: none"> <li>i. Waste originating from ships, or road or rail reserves, or park reserves.</li> <li>ii. Waste originating from river control works.</li> <li>iii. Waste to be burned for the purposes of disease control or quarantine control in accordance with Section 7A and Part VII of the Biosecurity Act 1993, or for fire training purposes.</li> </ul> <p>b. Except for burning undertaken in accordance with (c), (i) and (ii) below any material burnt on, or originating from industrial or trade premises shall be burned using fuel burning equipment, and the discharge shall be from a chimney or exhaust structure designed so that the emission is effectively dispersed upwards.</p> <p>c. The material to be burned shall not contain any animal waste (except animal waste generated on production land), tyres or other rubber, waste oil, any waste products containing hydrocarbons wood treated with chemicals, painted wood, chip board, plastic, asbestos, medical waste, chemical waste, or any combination of metals and combustible materials, except where the burning is:</p> <ul style="list-style-type: none"> <li>i. for the purpose of disease control or quarantine control in accordance with Section 7A and Part VII of the Biosecurity Act 1993, or</li> <li>ii. for the purpose of fire training.</li> </ul> <p>d. The discharge shall not result in any smoke that adversely affects traffic safety, or reduces visibility within a height of 5 m above ground level at any point beyond the boundary of the subject property, or reduces visibility within recognised flight paths in the vicinity of airports.</p> <p>e. The discharge shall not result in any objectionable deposition of particulate matter on any land or structure beyond the boundary of the subject property.</p> <p>f. The discharge shall not result in any offensive or objectionable odour, or any noxious or dangerous levels of gases, beyond the boundary of the subject</p>		

<sup>38</sup> Where discharges of contaminants occur as a result of Local Authorities carrying out their functions by burning waste on public land the above conditions (a) to (f) apply.

Rule	Activity	Classification	Conditions/Standards/Terms	Matters for Control/Discretion	Non-notification
			property.		
<b>19a</b> <u>Burning of vegetative matter, paper cardboard and untreated wood</u>	<u>The discharge of contaminants into air arising from the burning in the open of vegetative matter, paper, cardboard and untreated wood</u>	<u>Permitted</u>	<p><u>a. Burning shall only consist of vegetative matter, paper, cardboard and untreated wood generated on the same property, or a property under the same ownership.</u></p> <p><u>b. The discharge must not result in effects at or beyond the boundary of the site that are noxious or dangerous, offensive or objectionable.</u></p> <p><u>c. if the property is located within the Hastings or Napier airsheds Rule 19c must be complied with.</u></p> <p><u>d. The discharge shall not occur within 100 metres upwind, or 50 metres in any other direction, from any sensitive activity that is not located on the property where burning occurs.</u></p>		
<b>19b</b> <u>Outdoor burning for specified purposes</u>	<p><u>The discharge of contaminants into air from outdoor burning of materials for any of the following purposes:</u></p> <ul style="list-style-type: none"> <li><u>• fire fighting research or fire fighting training purposes</u></li> <li><u>• creating special smoke and fire effects for the purposes of producing films</u></li> <li><u>• fireworks display or other temporary event involving the use of fireworks.</u></li> </ul>	<u>Permitted</u>	<p>a. <u>The discharge takes place under the control of the New Zealand Fire Service or other nationally recognised body authorised to undertake fire fighting research or fire fighting activities.</u></p> <p>b. <u>The Council is notified at least 2 working days prior to the activity commencing.</u></p> <p>c. <u>The discharge must not result in effects at or beyond the boundary of the site that are noxious or dangerous, offensive or objectionable</u></p> <p>d. <u>if the property is located within the Hastings or Napier airsheds Rule 19c must be complied with.</u></p>		

<p><u>19c</u> <u>Outdoor burning during certain times of the year</u></p>	<p><u>Subject to Rule 20 the discharge of contaminants into air in the Hastings and Napier airsheds from outdoor burning during the months of May, June, July, August.</u><sup>38a</sup></p>	<p><u>Non complying</u></p>				
<p><u>19d</u> <u>Discharge to air from Orchard heaters</u></p>	<p><u>The discharge of contaminants into air from the burning of fuel in any Orchard Heater</u></p>	<p><u>Permitted</u></p>	<p><u>a. The discharge shall only take place to prevent frost damage horticultural production crops.</u> <u>b. the discharge shall only take place in a device that operates with a stack or chimney.</u> <u>c. The fuel shall not comprise any of the specific fuels or waste specified in Rule 20.</u></p>			

**ADVISORY NOTE:**

1. **Territorial authority bylaws** – It is important to note that the rules above do not replace territorial local authority bylaws controlling burning. Persons burning any waste or other materials should ensure that they comply with any relevant bylaws, included prohibited or restricted fire seasons.

38a Rule 19d does not override Regulation 10 of the NES which prohibits the burning of oil in the open.

2. **Non-compliance with rule** – If Rule 19a cannot be complied with then the activity is non-complying under Rule 19C.

Rule	Activity	Classification	Conditions/Standards/Terms	Matters for Control/Discretion	Non-notification
<p>20</p> <p>Burning of specified waste in the open &amp; in small scale fuel burning devices</p> <p>Refer POL 69</p>	<p><u>Except as provided for in Rule 20a the discharge of contaminants into air arising from the burning in the open of, and/or in small scale solid fuel burning devices:-</u></p> <ul style="list-style-type: none"> <li>• any combination of metals and combustible materials, including coated or covered cables, or</li> <li>• animal waste (excluding animal waste generated on production land), tyres and other rubber, waste oil, wood treated with chemicals, <u>oiled, painted or stained</u> wood, chip board, <del>plastic</del>, asbestos, medical waste, <u>or</u> chemical waste, <u>or</u></li> <li>• <u>synthetic material, including but not limited to, motor vehicle parts, foams, fibreglass, batteries, surface coating materials, tar, or any type of plastic,</u></li> <li>• <u>peat, or</u></li> <li>• <u>sludge from industrial processes</u></li> </ul> <p>excluding circumstances where the combustion is for the purposes of disease control or quarantine control in accordance with the Biosecurity Act 1993, or for fire training purposes.</p>	<p>Prohibited</p>	<p><u>Compliance with Rule , except where the burning is for the purpose of disease control or quarantine control in accordance with Section 7A and Part VII of the Biosecurity Act 1993.</u></p>		

<p><u>20a</u> <u>Burning of waste for the purposes of disease control or quarantine control</u></p>	<p><u>The discharge of contaminants into air arising from the burning of waste for the purposes of disease control or quarantine control in accordance with Section 7A and Part VII of the Biosecurity Act 1993.</u></p>	<p><u>Permitted</u></p>			
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ADVISORY NOTES:

1. **Non-compliance with rule** – If Rule 19 cannot be complied with (and the activity is not prohibited by Rule 20), then the activity is a restricted discretionary activity under Rule 30.
2. **Disease control and quarantine control** – The Ministry of Agriculture administers disease control and quarantine control requirements.

## 6.5.2 MANAGEMENT OF WASTE & OTHER MATTER, EXCLUDING INDUSTRIAL & TRADE PREMISES - DISCHARGES TO AIR

Rule	Activity	Classification	Conditions/Standards/Terms	Matters for Control/Discretion	Non-notification
21 Waste & other matter, excluding industrial & trade premises <i>Refer POL 69</i>	<p>The discharge of contaminants into air arising from the storage, use, transfer, treatment or disposal of waste and other matter, excluding:</p> <ul style="list-style-type: none"> <li>Discharges into air from any industrial or trade premises.</li> <li>Discharges into air addressed by other Rules in this Plan.</li> <li>Discharges into air from moveable sources.</li> </ul>	Permitted	<p>a. Any waste which is <u>disposed of</u> shall have been generated on the subject property or on another property under the same ownership as that used for disposal.</p> <p>b. The discharge shall not result in any offensive or objectionable odour, or any noxious or dangerous levels of gases, beyond the boundary of the subject property.</p> <p>c. The discharge shall not result in any visible discharge of any material, including dust, beyond the boundary of the subject property.</p> <p>d. The discharge shall not result in any airborne liquid contaminant being carried beyond the boundary of the subject property.</p> <p>e. For any discharge into air arising from material sourced from industrial and trade premises, a management plan shall be prepared which sets out how conditions (b) to (d) will be met. A copy of this management plan shall be provided to the HBRC upon request.</p>		

### ADVISORY NOTES:

- Non-compliance with rule** - If Rule 21 cannot be complied with, then the activity is a restricted discretionary activity under Rule 30.
- Rule 20, condition (a)** – Note that condition (a) only restricts the source of waste to be disposed of. The source of waste or other matter that is stored, used, transferred or treated is not restricted.
- Industrial and trade premises** – The discharge of contaminants into air from industrial or trade premises, arising from the management of waste and other matter, is addressed under Rules 28 and 29.
- Combustion of waste** – The discharge of contaminants into air arising from the burning of waste and other matter, is addressed under Rules 19 and 20.

### 6.5.3 ABRASIVE BLASTING - DISCHARGES TO AIR

Rule	Activity	Classification	Conditions/Standards/Terms	Matters for Control/Discretion	Non-notification
22 Wet abrasive blasting  <i>Refer POL 69</i>	The discharge of contaminants into air from abrasive blasting, using wet abrasive blasting techniques.	Permitted	<ul style="list-style-type: none"> <li>a. The discharge shall not result in any noxious or dangerous levels of airborne contaminants beyond the boundary of the subject property or, in the case of public land, beyond 50 metres from the discharge or beyond the boundary of the public land, whichever is the lesser.</li> <li>b. The operator shall so far as is practicable collect and remove all debris and used blasting materials on a daily basis, and when operations are completed.</li> <li>c. There shall be no discharge of water spray or dust beyond the boundary of the subject property or, in the case of public land, beyond 50 metres from the discharge or beyond the boundary of the public land, whichever is the lesser.</li> </ul>		
23 Dry abrasive blasting – fixed source  <i>Refer POL 69</i>	The discharge of contaminants into air from dry abrasive blasting, other than from the use of a moveable source.	Permitted	<ul style="list-style-type: none"> <li>a. The discharge shall not result in any noxious or dangerous levels of airborne contaminants beyond the boundary of the subject property.</li> <li>b. All items shall be blasted within an abrasive blasting enclosure.</li> <li>c. There shall be no visible discharge of dust beyond the abrasive blasting enclosure.</li> <li>d. There shall be no discharge of water spray or dust beyond the boundary of the subject property.</li> </ul>		
24 Dry abrasive blasting – moveable source  <i>Refer POL 69</i>	The discharge of contaminants into air from abrasive blasting, using both dry abrasive blasting techniques and a moveable source.	Discretionary			

**ADVISORY NOTES:**

1. **Non-compliance with rules** - If Rules 22 or 23 cannot be complied with, then the activity is a restricted discretionary activity under Rule 30.
2. **Hazardous substances** - For the purpose of condition (a) of Rules 22 and 23, the surface to be blasted should not contain any significant levels of hazardous substances, including lead, zinc, arsenic, chromium, copper, mercury, asbestos, tributyl tin, thorium-based compounds, other heavy metals, and antifouling substances. The document "Guidelines for the Management of Lead-based Paint" (Occupational Safety and Health Service and Public Health Commission, 1995) provides comprehensive guidance for the removal of lead-based paints.
3. **Resource consents for multiple locations** - Nothing in Rule 24 precludes persons from applying for a single permit to cover multiple locations in the Hawke's Bay region.
4. Where discharges may enter water then the activity must also meet the requirements of Rule 49; or the requirements of the Operative Regional Coastal Plan (HBRC, 1999) where the discharge enters coastal waters.

## 6.5.4 MOVEABLE SOURCES - DISCHARGES TO AIR

Rule	Activity	Classification	Conditions/Standards/Terms	Matters for Control/Discretion	Non-notification
25 Moveable aggregate crushing & screening plants <i>Refer POL 69</i>	The discharge of contaminants into air from the operation of a moveable aggregate crushing and screening plant.	Permitted	a. There shall be no visible discharge of water spray or dust beyond the boundary of the subject property, or in the case of public land, beyond 50 metres from the discharge or beyond the boundary of the public land, whichever is the lesser.		
26 Moveable asphalt plants <i>Refer POL 69</i>	The discharge of contaminants into air arising from the operation of a moveable asphalt plant.	Discretionary			
27 Moveable road burners <i>Refer POL 69</i>	The discharge of contaminants into air arising from the operation of moveable equipment used to treat road surfaces with heat.	<b>Non-complying</b> <b>Prohibited</b>			

### ADVISORY NOTES:

1. **Non-compliance with rule** - If Rule 25 cannot be complied with, then the activity is a restricted discretionary activity under Rule 30.
2. **Resource consents for multiple locations** - Nothing in Rules 26 and 27 above precludes persons from applying for a single permit to cover multiple locations in the Hawke's Bay region.

## 6.5.5 INDUSTRIAL & TRADE PREMISES - DISCHARGES TO AIR

Rule	Activity	Classification	Conditions/Standards/Terms	Matters for Control/Discretion	Non-notification
<p>28</p> <p>Miscellaneous industrial &amp; trade premises</p> <p><i>Refer POL 8, 13, 14, 69</i></p>	<p>The discharge of contaminants into air from any industrial or trade premises caused by any of the following activities, that is not specifically regulated by any other rule within this Plan:</p> <ol style="list-style-type: none"> <li>1. waste disposal</li> <li>2. composting, where more than 100 m<sup>3</sup> (in total) of raw material, composting material and compost is held per premise at any one time</li> <li>3. combustion of natural or liquefied petroleum gas at a rate at the point of discharge exceeding 50 MW</li> <li>4. combustion of coal, oil or untreated wood at a rate at the point of discharge exceeding 10 MW</li> <li>5. the manufacture of cement, fertiliser, milk powder, other dried milk derived products, or rubber goods</li> <li>6. the manufacture of fibre board, pulp or paper</li> <li>7. the mechanical drying of treated timber</li> <li>8. rendering, tanning, fellmongering, skin or hide processing, or pet food processing</li> <li>9. fumigation processes, except for biosecurity purposes</li> <li>10. the manufacture of organic or inorganic chemicals, including pharmaceuticals</li> <li>11. crematoria</li> <li>12. asphalt plants</li> <li>13. hot dip galvanising</li> <li>14. manufacture or disposal of radioactive substances</li> <li>15. manufacture of soaps or detergents</li> <li>16. use of di-isocyanates or organic plasticisers</li> <li>17. manufacture of aluminium, steel, fibreglass, glass or frit</li> <li>18. sintering, calcining, or roasting of metal ores</li> <li>19. smelting of any metal or metal alloy, including scrap metal</li> <li>20. carbonisation, gasification, refining, purification, or reforming of natural gas, petroleum oil, shale, coal, wood, or other carbonaceous materials</li> <li>21. smelting or burning of calcium or calcium-magnesium carbonates to produce calcium or magnesium oxides or hydroxides.</li> </ol>	Discretionary			

Rule	Activity	Classification	Conditions/Standards/Terms	Matters for Control/ Discretion	Non-notification
<p>29</p> <p>Minor discharges from industrial &amp; trade premises</p> <p>Refer POL 69</p>	<p>The discharge of contaminants into air from any industrial or trade premises that is not specifically regulated by any other rule within this Plan, including:</p> <ul style="list-style-type: none"> <li>• discharges of heat to air</li> <li>• discharges of energy to air, including release of energy from sources of electromagnetic radiation, including radio transmitter, television, or cell phones; or release of X-rays from a radioactive source</li> <li>• discharges for the purposes of ventilation or vapour displacements</li> <li>• discharges arising from the use of fumigants for biosecurity purposes.</li> <li>• <u>Discharges of dust arising from the loading, unloading, and conveyance of goods and materials.</u></li> </ul>	<p>Permitted</p>	<ul style="list-style-type: none"> <li>a. The discharge shall not result in any noxious or dangerous levels of airborne contaminants beyond the boundary of the subject property.</li> <li>b. The opacity of any discharge of smoke when measured at the point of discharge shall not exceed 20%, except that a discharge in excess of this shall be permitted for a period of not more than two minutes continuously or for an aggregate of four minutes in any 60 minute period.</li> <li>c. There shall be no visible discharge of any contaminant beyond the boundary of the subject property or on public land, other than smoke from fuel burning equipment or water vapour.</li> <li>d. Any discharge of water vapour shall not result in any plume which adversely affects traffic safety, or reduces visibility within a height of 5 m above ground level at any point beyond the boundary of the subject property, or reduces visibility within recognised flight paths in the vicinity of airports.</li> <li>e. Any discharge of odour shall not be offensive or objectionable beyond the boundary of the subject property.</li> <li>f. The dust deposition rate resulting from the discharge shall not raise the ambient dust deposition rate by more than 4 g/m<sup>2</sup> per 30 days at any point beyond the boundary of the subject property.</li> <li>g. The discharge shall not result in any objectionable deposition of particulate matter on any land or structure beyond the boundary of the subject property.</li> </ul>		

Rule	Activity	Classification	Conditions/Standards/Terms	Matters for Control/ Discretion	Non-notification
			h. The discharge shall not result in any airborne liquid contaminant excluding water vapour being carried beyond the boundary of the subject property.  i. The discharge shall be located and designed to avoid cross contamination of air intake used for ventilation purposes.		

**ADVISORY NOTES:**

1. **Non-compliance with rule** - If Rule 29 cannot be complied with, then the activity is a restricted discretionary activity under Rule 30.

## 6.5.6 NON-COMPLIANCE WITH OTHER RULES - DISCHARGES TO AIR

Rule	Activity	Classification	Conditions/Standards/Terms	Matters for Control/Discretion	Non-notification
<p>30</p> <p>Discharges of contaminants to air not regulated by, or that cannot comply with rules 11-19, 21-29</p> <p>Refer POL 8, 12, 13, 14, 16, 17, 19, 20, 69, 71, 75</p>	<p>The discharge of contaminants into the air that:</p> <ul style="list-style-type: none"> <li>• is not specifically classified by any other rule in this Plan as a discretionary, non-complying or prohibited activity or</li> <li>• does not comply with all relevant conditions on a permitted activity rule or</li> <li>• does not comply with all relevant standards and terms on a controlled activity rule or restricted discretionary activity rule.</li> </ul> <p>which cannot comply with any condition on a permitted activity rule, or any standard or term on a controlled activity rule within this Plan, but which is not expressly classified as a discretionary, non-complying, or prohibited activity.</p>	<p>Restricted discretionary</p>		<p>a. The conditions, standards or terms which the activity cannot comply with, and the related environmental effects.</p> <p>b. For activities that would otherwise be permitted or controlled activities (if they complied with all standards and terms of the relevant rule), the conditions/standards/terms or "matters for control" set out in the relevant rule.</p> <p>c. Duration of consent.</p> <p>d. Lapsing of consent.</p> <p>e. Review of consent conditions.</p> <p>f. Compliance monitoring.</p> <p>g. Contaminant emission limits</p> <p>k. Any measures necessary to ensure maintenance of fuel burning equipment, the carrying out of measurements, samples, analysis, surveys, investigations or inspections including, the monitoring of: contaminant concentrations and emission rates; the opacity of the discharge, quantity of fuel used, the cumulative effects of the discharge in combination with discharges from other sources, and the provision of information to the consent authority at specified times.</p> <p>l. Administrative charges.</p>	<p>Applications will generally be considered without notification, without the need to obtain the written approval of affected persons.</p>

Rule	Activity	Classification	Conditions/Standards/Terms	Matters for Control/Discretion	Non-notification
				<p>m. <u>Effects on flight paths.</u></p> <p>n. <u>New technologies available to minimise any discharges or their effects.</u></p> <p>o. <u>Methods used to disperse contaminants, including chimney height, chimney design and emission velocity. Chimney height will be determined generally in accordance with Schedule IX.</u></p>	

## Schedule XII: Emission Requirements - small scale pellet burning appliances

### Small scale pellet burning appliances must:

- a) emit no more than 0.8 grams of total suspended particulate per hour on average, calculated by averaging the total suspended particulate emissions for high, medium and low burn rates, when tested in accordance with the functional equivalent of AS/NZS4012:1999 and AS/NZS4013:1999 for nonbatch fed appliances, and using wood pellets meeting the standard set out below, and
- b) have a thermal efficiency, for space heating only, as described by AS/NZS4013:1999, of 70% or greater, and
- c) be consistent with the definition of pellet burner in the Regional Resource Management Plan
- d) shall not be modified in any way so as to alter the specifications of the heating device from those tested and stated by the manufacturer
- e) be maintained in good operational order and operated in accordance with the manufacturer's instructions and
- f) be capable of being operated on a high, medium and low burn rate.

### Wood pellets

Wood pellets used in any small scale pellet burning appliance shall not use any wood treated with preservatives or impregnated with chemicals, and must comply with the following standards:

<u>Average moisture content (as delivered)</u>	<u>4 – 8% (of wet mass)</u>
<u>Ash</u>	<u>not more than 0.5% (oven dry basis)</u>
<u>Gross calorific value (as delivered)</u>	<u>18 to 20 MJ/kg</u>
<u>Diameter</u>	<u>not more than 10mm</u>
<u>Length</u>	<u>not more than 38mm</u>
<u>Bulk density</u>	<u>not less than 640 kg/m<sup>3</sup></u>

## Schedule XIII: Emission Requirements - small scale solid fuel burning appliances

### A Small scale solid-fuel burning appliances must:

- a) emit no more than 1.5 grams of total suspended particulate per kilogram of fuel burned, calculated by averaging the total suspended particulate emissions for high, medium and low burn rates, when tested in accordance with AS/NZS4012:1999 and AS/NZS4013:1999 or the functional equivalent for non batch-fed appliances. Where the nominated test fuel is wood then the test shall be carried out using softwood in accordance with the requirements of AS/NZS 4014.2:1999; and
- b) have a thermal efficiency, for space heating only, as described in AS/NZS4013:1999, of 65% or greater, and
- c) shall comply with the definition of NESAQ compliant burning appliance in the Regional Resource Management Plan
- g) not be modified in any way so as to alter the specifications of the heating device from those tested and stated by the manufacturer
- h) be maintained in good operational order and operated in accordance with the manufacturer's instructions
- i) be capable of being operated on a high, medium and low burn rate.

Schedule XIV: Napier and Hastings airshed Boundaries

## Summary of Rules

Rule	Activity description	Intent of rule changes or new rule
<p><b>Rule 17:</b> Combustion of specified fuels</p>	<p>The discharge of any contaminant into air from any industrial or trade premises or any other source, excluding any moveable source and any dwellinghouse<sup>36</sup>, arising from the combustion of:</p> <ul style="list-style-type: none"> <li>• Natural or liquefied petroleum gas; and/or Coal, oil (excluding waste oil) or untreated wood.</li> </ul>	<p>An additional condition has been added to this rule ensure that the fuel does not comprise any of the waste materials specified in Rule 20.</p>
<p><b>Rule 18:</b> Combustion of specified fuels</p>	<p>Except as provided for by Rules 17 and 18a, the discharge of any contaminant into air from any industrial or trade premises or any other source, excluding any moveable source and any dwellinghouse, arising from the combustion of:</p> <ul style="list-style-type: none"> <li>• natural or liquefied petroleum gas, or coal, oil (or untreated wood)</li> </ul>	<p>An additional condition has been added to this rule ensure that the fuel does not comprise any of the waste materials specified in Rule 20; and</p> <p>Additional matters of control have been added to this rule relating to:</p> <ul style="list-style-type: none"> <li>- Contaminant emission limits</li> <li>- Methods used to disperse contaminants</li> <li>- Samples</li> <li>- Investigations</li> <li>- The quality of the fuel.</li> <li>- Monitoring</li> <li>- New technologies available.</li> </ul>
<p><u><b>Rule 18a:</b> The discharge of PM<sub>10</sub> to air from the combustion of specified fuels – existing industrial or trade premises located in the Napier and Hastings airsheds (1 September 2013 – 1 September 2018)</u></p>	<p>From 1 September 2013 to 1 September 2018 the discharge of PM<sub>10</sub> into air from any existing industrial or trade premises*, located in the Napier or Hastings airsheds*, arising from the combustion of:</p> <ul style="list-style-type: none"> <li>• Liquefied petroleum gas or natural gas; diesel and kerosene; tallow, light fuel oil, heavy fuel oil; or coal, or untreated wood</li> </ul>	<p>This Rule allows existing industry to continue operating after 1 September 2013 if the NESAQ for PM<sub>10</sub> has not been met, for an additional five years.</p> <p>This rule only permits the discharge of PM<sub>10</sub> from industry, all other discharges will need resource consent.</p>

Rule	Activity description	Intent of rule changes or new rule
<u>Rule 18b: Discharge to air from open fires</u>	Except as provided for by Rule 18f , the discharge of contaminant to air from a building located within the Hastings or Napier airsheds* from the burning of any solid fuel in any open fire from 1 January 2011.	This Rule prohibits the use of open fires from 1 January 2011, unless the open fire is located within a registered historic building.
<u>Rule 18c: discharge to air from any small scale pellet burning appliance – Hastings Airshed</u>	<p>The discharge of contaminants to air from a small scale pellet burning appliance in:</p> <p>any new building, or any building that did not have a small scale fuel burning device at 30 April 2009, including extension or alteration to the building; and</p> <p>Within the Hastings airshed*</p>	<p>Within the Hastings airshed, this Rule permits the installation of pellet fires that have a design criteria of 0.8 g/kg, in new buildings or buildings that do not currently have an existing small scale solid fuel burning device.</p> <p>Within the Hastings airshed, this Rule means that resource consent will need to be gained for the installation of a NESAQ compliant solid fuel burners in new buildings, or buildings that do not currently have an existing small scale solid fuel burning device</p>
<u>Rule 18d: discharge to air from any small scale solid fuel burning appliance - Napier &amp; Hastings's Airsheds</u>	<p>The discharge of contaminants to air from small scale fuel burning appliances in a building located:</p> <p>within the Hastings airshed*, and being installed to specifically replace a small scale fuel burning device installed before 30 April 2009, or</p> <p>within the Napier airshed*</p>	<p>Within the Napier airshed this Rule permits the installation of a NESAQ compliant solid fuel burner in any house.</p> <p>Within the Hastings airshed, this Rule permits the installation of NESAQ compliant solid fuel burners, where the burner is <u>replacing</u> an existing small scale solid fuel burning device.</p>
<u>Rule 18e: discharge to air from any small scale solid fuel burning appliance - greater region airshed</u>	The discharge of contaminants into air from any small scale solid fuel burning appliance in a building located in the greater region airshed*	Outside the Hastings and Napier airsheds, this Rule permits the installation of any type of solid fuel burning device providing it complies with the standards within the NESAQ if the subject property is under 2 hectares.
<u>Rule 18f: discharge to air from any small scale solid fuel burning appliance - registered historic building</u>	The discharge of contaminants into air from the burning of fuel in any existing enclosed burner or open fire that is located within a registered historic building. <sup>1b</sup>	This Rule permits open fires and non complying wood burners to be located, and used within registered historic buildings.

Rule	Activity description	Intent of rule changes or new rule
<p><u>Rule 18g: discharge to air from any small scale solid fuel burning appliance installed prior to 30 April 2009</u></p>	<p>Except as provided for by Rules 18c and 18d, the discharge of contaminants onto air from any small scale fuel burning appliances in a building located in the Napier and Hastings airsheds is prohibited from the following dates:</p> <ul style="list-style-type: none"> <li>• Solid fuel burners installed prior to 31 December 1995 are prohibited from use after 1 January 2011;</li> <li>• Solid fuel burners installed between 1 January 1996 and 31 August 2005 are prohibited from use after 1 January 2012.</li> <li>• Solid fuel burners installed after 1 September 2005 that do not comply with the requirements in Schedule XIII are prohibited from use after 1 January 2013.</li> </ul>	<p>This Rule prohibits the use of all non complying small scale solid fuel burners by 1 January 2013 at the latest.</p>
<p><b>Rule 19:</b> Burning of waste</p>	<p>The discharge of contaminants into air arising from the burning of waste.<sup>38</sup></p>	<p>No change</p>
<p><u>Rule 19a: Burning of vegetative matter , paper cardboard and untreated wood</u></p>	<p>The discharge of contaminants into air arising from the burning in the open of vegetative matter, paper, cardboard and untreated wood</p>	<p>This Rule permits outside burning providing it does not take place during the months of May to August, inclusive.</p> <p>This Rule means that resource consent is required to undertake outdoor burning within the Napier and Hastings airsheds during the months May to August, inclusive.</p>

Rule	Activity description	Intent of rule changes or new rule
<u>Rule 19b: Outdoor burning for specified purposes</u>	<p>The discharge of contaminants into air from outdoor burning of materials for any of the following purposes:</p> <ul style="list-style-type: none"> <li>• fire fighting research or fire fighting training purposes</li> <li>• creating special smoke and fire effects for the purposes of producing films</li> <li>• fireworks display or other temporary event involving the use of fireworks.</li> </ul>	<p>This Rule permits outside burning for specified purposes providing it does not take place during the months of May to August, inclusive.</p> <p>This Rule means that resource consent is required for any outdoor burning for specified purposes to take place within the Napier and Hastings airsheds during the months May to August, inclusive.</p>
<u>Rule 19c: Outdoor burning during certain times of the year</u>	<p>Subject to Rule 20 the discharge of contaminants into air in the Hastings and Napier airsheds from outdoor burning during the months of May, June, July, August. <sup>38a</sup></p>	<p>This Rule means that resource consent is required to undertake any outdoor burning within the Napier and Hastings airsheds during the months of May to August, inclusive.</p>
<u>Rule 19d: Discharge to air from Orchard heaters</u>	<p>The discharge of contaminants into air from the burning of fuel in any Orchard Heater</p>	<p>This Rule permits the use of oil heaters to prevent fruit/tree damage from frosts.</p>

Rule	Activity description	Intent of rule changes or new rule
<p><b>Rule 20:</b> Burning of specified waste in the open &amp; <u>in small scale fuel burning devices</u></p>	<p>Except as provided for in Rule 20a the discharge of contaminants into air arising from the burning in the open of, and/or in small scale solid fuel burning devices:</p> <ul style="list-style-type: none"> <li>• any combination of metals and combustible materials, including coated or covered cables, or</li> <li>• animal waste (excluding animal waste generated on production land), tyres and other rubber, waste oil, wood treated with chemicals, oiled, painted or stained wood, chip board, asbestos, medical waste, or chemical waste, or</li> <li>• synthetic material, including but not limited to, motor vehicle parts, foams, fibreglass, batteries, surface coating materials, tar, or any type of plastic,</li> <li>• peat, or</li> <li>• sludge from industrial processes</li> </ul> <p>excluding circumstances where the combustion is for the purposes of disease control or quarantine control in accordance with the Biosecurity Act 1993, or for fire training purposes.</p>	<p>This Rule prohibits the burning any of the specified materials in the open or within any small scale burning device.</p>
<p><b>Rule 20a:</b> Burning of waste for the purposes of disease control or quarantine control</p>	<p>The discharge of contaminants into air arising from the burning of waste for the purposes of disease control or quarantine control in accordance with Section 7A and Part VII of the Biosecurity Act 1993.</p>	<p>This Rule allows for the burning of waste for the purposes of disease control or quarantine control at any time.</p>

Rule	Activity description	Intent of rule changes or new rule
<b>Rule 21:</b> Waste & other matter, excluding industrial & trade premises	The discharge of contaminants into air arising from the storage, use, transfer, treatment or disposal of waste and other matter, excluding: <ol style="list-style-type: none"> <li>1. Discharges into air from any industrial or trade premises.</li> <li>2. Discharges into air addressed by other Rules in this Plan.</li> <li>3. Discharges into air from moveable sources.</li> </ol>	No change
<b>Rule 22:</b> Wet abrasive blasting	The discharge of contaminants into air from abrasive blasting, using wet abrasive blasting techniques.	No change
<b>Rule 23:</b> Dry abrasive blasting – fixed source	The discharge of contaminants into air from dry abrasive blasting, other than from the use of a moveable source.	No change
<b>Rule 24:</b> Dry abrasive blasting – moveable source	The discharge of contaminants into air from abrasive blasting, using both dry abrasive blasting techniques and a moveable source.	No change
<b>Rule 25:</b> Moveable aggregate crushing & screening plants	The discharge of contaminants into air from the operation of a moveable aggregate crushing and screening plant.	No change
<b>Rule 26:</b> Moveable asphalt plants	The discharge of contaminants into air arising from the operation of a moveable asphalt plant.	No change
<b>Rule 27:</b> Moveable road burners	The discharge of contaminants into air arising from the operation of moveable equipment used to treat road surfaces with heat.	The burning of bitumen is now prohibited in accordance with the NESAQ.

Rule	Activity description	Intent of rule changes or new rule
<p><b>Rule 28:</b> Miscellaneous industrial &amp; trade premises</p>	<p>The discharge of contaminants into air from any industrial or trade premises caused by any of the following activities, that is not specifically regulated by any other rule within this Plan:</p> <ol style="list-style-type: none"> <li>1. waste disposal</li> <li>2. composting, where more than 100 m<sup>3</sup> (in total) of raw material, composting material and compost is held per premise at any one time</li> <li>3. combustion of natural or liquefied petroleum gas at a rate at the point of discharge exceeding 50 MW</li> <li>4. combustion of coal, oil or untreated wood at a rate at the point of discharge exceeding 10 MW</li> <li>5. the manufacture of cement, fertiliser, milk powder, other dried milk derived products, or rubber goods</li> <li>6. the manufacture of fibre board, pulp or paper</li> <li>7. the mechanical drying of treated timber</li> <li>8. rendering, tanning, fellmongering, skin or hide processing, or pet food processing</li> <li>9. fumigation processes, except for biosecurity purposes</li> <li>10. the manufacture of organic or inorganic chemicals, including pharmaceuticals</li> <li>11. crematoria</li> <li>12. asphalt plants</li> <li>13. hot dip galvanising</li> <li>14. manufacture or disposal of radioactive substances</li> <li>15. manufacture of soaps or detergents</li> <li>16. use of di-isocyanates or organic plasticisers</li> <li>17. manufacture of aluminium, steel, fibreglass, glass or frit</li> <li>18. sintering, calcining, or roasting of metal ores</li> <li>19. smelting of any metal or metal alloy, including scrap metal</li> <li>20. carbonisation, gasification, refining, purification, or reforming of natural gas, petroleum oil, shale, coal, wood, or other carbonaceous materials</li> <li>21. smelting or burning of calcium or calcium-magnesium carbonates to produce calcium or magnesium oxides or hydroxides.</li> </ol>	<p>No change</p>

Rule	Activity description	Intent of rule changes or new rule
<p><b>Rule 29:</b> Minor discharges from industrial &amp; trade premises</p>	<p>The discharge of contaminants into air from any industrial or trade premises that is not specifically regulated by any other rule within this Plan, including:</p> <ul style="list-style-type: none"> <li>• discharges of heat to air</li> <li>• discharges of energy to air, including release of energy from sources of electromagnetic radiation, including radio transmitter, television, or cell phones; or release of X-rays from a radioactive source</li> <li>• discharges for the purposes of ventilation or vapour displacements</li> <li>• discharges arising from the use of fumigants for biosecurity purposes.</li> <li>• Discharges of dust arising from the loading, unloading, and conveyance of goods and materials.</li> </ul>	
<p><b>Rule 30:</b> Discharges of contaminants to air not regulated by, or that cannot comply with rules 11-19, 21-29</p>	<p>The discharge of contaminants into the air that:</p> <ul style="list-style-type: none"> <li>• is not specifically classified by any other rule in this Plan as a discretionary, non-complying or prohibited activity or</li> <li>• does not comply with all relevant conditions on a permitted activity rule or</li> <li>• does not comply with all relevant standards and terms on a controlled activity rule or restricted discretionary activity rule.</li> </ul>	<p>Additional matters of discretion have been added to this rule relating to:</p> <ul style="list-style-type: none"> <li>- Contaminant emission limits</li> <li>- Methods used to disperse contaminants</li> <li>- Samples</li> <li>- Investigations</li> <li>- The quality of the fuel</li> <li>- Monitoring</li> <li>- New technologies available</li> </ul>