

## **E14. Air quality**

### **E14.1. Description**

These provisions relate to the management of air quality. The range of residential, commercial and industrial land uses means there needs to be greater focus on the management of individual discharges to air from various sources and the separation of incompatible land uses. Industrial processes and their operation need to be recognised because they cannot avoid discharging contaminants into air. Their effects need to be managed using suitable control technology and on-site management techniques. These industries also need to be located in appropriate areas.

In Auckland's coastal marine area, air discharges are localised and usually temporary in nature.

In the rural areas, low densities of development, good on-site management practices and adequate separation are used to manage the effects of contaminants into air on human health and neighbourhood dust and odour levels.

### **E14.2. Objectives [rcp/rp]**

- (1) Air quality is maintained in those parts of Auckland that have high air quality, and air quality is improved in those parts of Auckland that have low to medium air quality.
- (2) Air discharges from use and development meet Auckland Ambient Air Quality Standards.
- (3) Human health, property and the environment are protected from significant adverse effects from the discharge of contaminants to air.
- (4) Incompatible uses and development are separated to manage adverse effects on air quality from discharges of contaminants into air and avoid or mitigate reverse sensitivity effects.
- (5) The operational requirements of light and heavy industry, other location-specific industry, infrastructure, rural activities and mineral extraction activities are recognised and provided for.

### **E14.3. Policies [rcp/rp]**

- (1) Protect human health by requiring that air discharges do not cause ambient air quality to exceed the Auckland Ambient Air Quality Standards in Table E14.3.1 for the specified contaminants.
- (2) Manage the discharge of contaminants to air so that adverse effects on human health, including cumulative adverse effects, are avoided, and all other adverse effects are remedied or mitigated.
- (3) In the coastal marine area and in urban and rural zones, except for those zones and precincts subject to policies E14.3(4) to (7):

- (a) avoid offensive and objectionable effects from dust and odour discharges and remedy or mitigate all other adverse effects of dust and odour discharges; or
  - (b) require adequate separation distance between use and development which discharges dust and odour to air and activities that are sensitive to adverse effects of dust and odour discharges, or both of the above.
- (4) In the Rural – Rural Production Zone, Rural – Mixed Rural Zone, Rural – Rural Coastal Zone, Future Urban Zone, Auckland Council District Plan - Hauraki Gulf Islands Rural 1-3 and Landform 1-7:
- (a) recognise that rural air quality is generally a result of dust and odours, and other emissions generated by rural production activities;
  - (b) avoid, remedy or mitigate adverse effects of dust and odour discharges;
  - (c) provide for minor and localised elevation of dust and odour levels where the air discharge is from:
    - (i) rural production activities or rural industry; or
    - (ii) the operation of infrastructure or location specific industry; or
    - (iii) mineral extraction activities; or
    - (iv) activities undertaken by the New Zealand Defence Force for training and munitions testing; or
    - (v) for emergency services training;
  - (d) require adequate separation between use and development which discharge dust and odour and activities that are sensitive to these adverse effects.
- (5) Support the use and development in the Business – Light Industry Zone, Coastal – Minor Port Zone, the Port Precinct, Auckland Airport Precinct and Auckland Council District Plan - Hauraki Gulf Islands Commercial 5 Zone, by providing for medium dust and odour levels and avoiding, remedying or mitigating, the adverse effects of dust and odour.
- (6) Support the use and development in the Business – Heavy Industry Zone, Special Purpose – Quarry Zone and Auckland Council District Plan - Hauraki Gulf Islands Commercial 6 Zone by:
- (a) providing for higher levels of dust and odour provided that any adverse effects on human health are avoided, remedied or mitigated;
  - (b) avoiding the establishment of activities sensitive to air discharges in these zones; and

- (c) discouraging the establishment of activities sensitive to air discharges in areas adjacent to these zones.
- (7) Avoid the discharge of contaminants to air from industrial activities in rural zones and the coastal marine area except where the activity is:
- (a) location specific, such as mineral extraction activities and mineral processing, wastewater treatment facilities, marine and port activities,
  - (b) undertaken by the New Zealand Defence Force for training and munitions testing, or for emergency services training;
  - (c) infrastructure requiring large separation distances that cannot be provided for within urban areas; or
  - (d) a rural industry.
- (8) Require discharges of contaminants to air from outdoor burning (except when associated with test and training exercises by emergency response services), to be:
- (a) avoided in urban and industrial areas and the coastal marine area; or
  - (b) minimised in rural areas; or
  - (c) minimised where it is for community or public event purposes or for cooking.
- (9) Avoid, remedy or mitigate the adverse effects on air quality from discharges of contaminants into air by:
- (a) using the best practicable option for emission control and management practices that are appropriate to the scale of the discharge and potential adverse effects; or
  - (b) adopting a precautionary approach, where there is uncertainty and a risk of significant adverse effects or irreversible harm to the environment from air discharges.
- (10) Avoid, remedy or mitigate the adverse effects on air quality beyond the boundary of the premises where the discharge of contaminants to air is occurring, in relation to:
- (a) noxious or dangerous effects on human health, property or the environment from hazardous air pollutants; or
  - (b) overspray effects on human health, property or the environment.
- (11) Require large scale combustion sources that discharge contaminants to air to avoid, remedy or mitigate any adverse effects on aircraft safety.

- (12) Enable the use of air quality offsets in achieving compliance with relevant standards and other provisions in the plan.

**Table E14.3.1 Auckland Ambient Air Quality Standards (AAQS)**

Contaminant	Standard	Averaging Time	Number of permissible exceedances per year
Particles less than 10 microns (PM10)	50 µg/m <sup>3*</sup>	24 hour	1
	20 µg/m <sup>3</sup>	Annual	0
Particles less than 2.5 microns (PM2.5)	25 µg/m <sup>3</sup>	24 hour	0
	10 µg/m <sup>3</sup>	Annual	0
Nitrogen dioxide (NO <sub>2</sub> )	200 µg/m <sup>3*</sup>	1 hour	9
	100 µg/m <sup>3</sup>	24 hour	0
	40 µg/m <sup>3</sup>	Annual	0
Carbon monoxide (CO)	10 mg/m <sup>3*</sup>	8 hours (running mean)	one 8-hour period
	30 mg/m <sup>3</sup>	1 hour	0
Sulphur dioxide (SO <sub>2</sub> )	350 µg/m <sup>3*</sup>	1 hour	9
	570 µg/m <sup>3*</sup>	1 hour	0
	20 µg/m <sup>3</sup>	24 hour	0
Ozone (O <sub>3</sub> )	150 µg/m <sup>3*</sup>	1 hour	0
	100 µg/m <sup>3</sup>	8 hour	0
Lead	0.2 µg/m <sup>3</sup>	3 month moving average calculated monthly	0
Benzene	3.6 µg/m <sup>3</sup>	Annual	0
Benzo[a]pyrene	0.0003 µg/m <sup>3</sup>	Annual	0
1,3-Butadiene	2.4 µg/m <sup>3</sup>	Annual	0
Formaldehyde	100 µg/m <sup>3</sup>	30 minutes	0
Acetaldehyde	30 µg/m <sup>3</sup>	Annual	0
Mercury (inorganic)	0.33 µg/m <sup>3</sup>	Annual	0
Mercury (organic)	0.13 µg/m <sup>3</sup>	Annual	0
Chromium VI	0.0011 µg/m <sup>3</sup>	Annual	0
Chromium metal and Chromium III	0.11 µg/m <sup>3</sup>	Annual	0
Arsenic (inorganic)	0.0055 µg/m <sup>3</sup>	Annual	0
Arsine	0.055 µg/m <sup>3</sup>	Annual	0

Asterisk \* = AAQS taken from the NES

#### E14.4. Activity table

Table E14.4.1 Activity table specifies the activity status for the discharge of contaminants into air pursuant to section 15 of the Resource Management Act 1991.

Refer to other provisions in the Plan for the activity status of the related land use activity that may require resource consent.

The Strategic Transport Corridor Zone and roads, will assume the most stringent air quality requirements of the adjacent zones [rp].

Refer to the Auckland Council District Plan - Hauraki Gulf Islands Section for sites zoned as Rural 1 – 3, Landform 1 -7, Commercial 5 (Industrial) and Commercial 6 (Quarry) zones and other Hauraki Gulf Islands zones of the Hauraki Gulf Islands Section of the Auckland Council District Plan.

The spatial area to which the columns in Table E14.4.1 Activity table apply to is as follows.

- (1) Low air quality – dust and odour area (Quarry) includes the Special Purpose – Quarry Zone and Auckland Council District Plan - Hauraki Gulf Islands Section Commercial 6 Zone [rp].
- (2) Low air quality – dust and odour area (Industry) includes the Business – Heavy Industry Zone [rp].
- (3) Medium air quality – dust and odour area (Industry) includes the Business – Light Industry Zone, Coastal – Minor Port Zone, Port Precinct, Gabador Place Precinct, Boat Building Precinct, Auckland Airport Precinct, and Auckland Council District Plan - Hauraki Gulf Islands Section Commercial 5 Zone [rcp/rp].
- (4) Medium air quality – dust and odour rural area (Rural) includes the Rural – Rural Production Zone, Rural – Mixed Rural Zone, Rural – Rural Coastal Zone, Future Urban Zone, Auckland Council District Plan - Hauraki Gulf Islands Section Rural 1-3 and Landform 1-7 [rp].
- (5) High air quality – dust and odour area includes all other zones (including all coastal zones and Auckland Council District Plan - Hauraki Gulf Islands Section other zones) [rcp/rp].

Table E14.4.1 Activity table

Activity		Activity status				
		High air quality - dust and odour area	Medium air quality - dust and odour rural area (Rural)	Medium air quality - dust and odour area (Industry)	Low air quality - dust and odour area (Industry)	Low air quality - dust and odour area (Quarry)
<b>Discharge of contaminants into air from activities not provided for in other rules in this table</b>						
(A1)	Activities meeting the permitted activity standards and not provided for by any other rule	P	P	P	P	P
(A2)	Activities not meeting the permitted activity standards and not provided for by any other rule	D	D	D	D	D
(A3)	Activities not meeting the restricted discretionary activity standards and not provided for by any other rule	D	D	D	D	D
<b>Discharge of contaminants into air from chemical and metallurgical processes</b>						
(A4)	Any process that discharges more than 20kg/hour or 10t/year of volatile organic compounds such as large-scale application of surface coatings or printing ink without the application of heat, excluding the ventilation, displacement or dispensing of motor fuels and excluding road marking	D	D	D	D	D
(A5)	Electroplating	RD	RD	RD	RD	RD
(A6)	Fumigant for use in commercial pest control	P	P	P	P	P
(A7)	Mechanical shredding of scrap indoors, including the mechanical removal of plastic or rubber covering from cable, where discharges to air are through particulate control equipment	P	P	P	P	P
(A8)	Melting of any metal or metal alloy at a rate of no more than 100kg/hour excluding the recycling and melting of scrap metal	P	P	P	P	P

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(A9)	Melting of any metal or metal alloy at a rate between 100kg/hour and 1t/hour excluding welding and jewellery manufacture	NC	RD	RD	RD	RD
(A10)	Removal of coatings from wire or cable by heating with emissions control equipment	NC	D	D	D	D
(A11)	Removal of coatings from wire or cable by heating not provided for by any other rule	Pr	Pr	Pr	Pr	Pr
(A12)	Spray application of surface coatings containing diisocyanates or hazardous organic plasticisers at an individual site not in a spray booth or at a domestic premises at an application rate no more than 2L/day	P	P	P	P	P
(A13)	Spray application of surface coatings containing diisocyanates or organic plasticisers for maintenance of infrastructure	P	P	P	P	P
(A14)	Spray application of surface coatings containing diisocyanates or organic plasticisers in a spray booth	P	P	P	P	P
(A15)	Spray application of surface coatings containing diisocyanates or organic plasticisers not meeting the permitted activity standards	RD	RD	RD	RD	RD
(A16)	Chemical processes or activities associated with small-scale operations (such as home hobby operations, and on-farm blending of fertilisers)	P	P	P	P	P
(A17)	Bodying of oils or manufacture of monomers, synthetic resins, varnishes, plastics or adhesives	D	D	D	D	D
(A18)	Storage, manufacture or use of acrylates	D	D	D	D	D
(A19)	Use of more than nine kilograms per hour of styrene	D	RD	RD	P	P
(A20)	Production of soap, grease, or surface active agents	D	D	D	D	D
(A21)	Synthesis or extraction of organic chemicals, including synthesis, extraction, blending or formulation of	D	D	D	D	D

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	agricultural, or plant hormones					
(A22)	Production of inorganic chemicals, including concentration of acids or anhydrides, ammonia or alkalis	D	D	D	D	D
(A23)	Production or blending of fertilisers, including the granulation of single or mixed fertilizers	D	D	D	D	D
(A24)	Solvent manufacture or recovery	D	D	D	D	D
(A25)	Distillation, refining or other processing of petroleum or petrol products	D	D	D	D	D
(A26)	Total or partial disposal of solid or liquid substances by chemical decomposition	D	D	D	D	D
(A27)	Dry distillation of coal or lignite	D	D	D	D	D
(A28)	Production of metals or non-metals by a wet process or by means of electrical or mechanical energy	D	D	D	D	D
(A29)	Production, processing or treatment of organic or inorganic compounds	D	D	D	D	D
(A30)	Separation, dewatering through the application of heat or distillation of hydrocarbons including used (waste) oil	D	D	D	D	D
(A31)	Use of bitumen in the manufacture of products other than roading mix	D	D	D	D	D
(A32)	Carbonising or destructive distillation of hydrocarbons where the solid, liquid or gaseous products are recovered	D	D	D	D	D
(A33)	Gasification of any hydrocarbon by partial combustion with air or oxygen or reaction with steam	D	D	D	D	D
(A34)	Manufacturing of semiconductors, explosives, paints, inks or powder coatings	D	D	D	D	D
(A35)	Industrial gas manufacturing	D	D	D	D	D
(A36)	Cleaning of metal by pyrolysis	D	D	D	D	D
(A37)	Manufacture of rigid or flexible polyurethane foam using diisocyanates, or methylene chloride at a rate exceeding a total of 100 kilograms per hour	D	D	D	D	D



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(A38)	Use of more than 200 kilogrammes per hour of resins	D	D	D	D	D
(A39)	The melting of any metal or metal alloy used in the process of thermal metal spraying, including zinc, that does not comply with the permitted activity standards	D	D	D	D	D
(A40)	The extraction, including electrochemical methods of reduction, of any metal or metal alloy from its ore, oxide or other compounds	D	D	D	D	D
(A41)	The manufacture of steel, the refining of any metal, or the modification of any alloy in the molten state	D	D	D	D	D
(A42)	Melting of any metal or metal alloy with a melting capacity of more than 1t/hour	D	D	D	D	D
(A43)	Galvanizing	D	D	D	D	D
(A44)	Heating in a furnace or other appliance of any metal or metal alloy for the purpose of removing grease, oil or any other non-metallic contaminant, including drum reconditioning	D	D	D	D	D
(A45)	Removal by heating of any material from wire or cables where all emissions pass through control equipment that minimises emissions of dioxins and other hazardous air pollutants	D	D	D	D	D
(A46)	Heating or burning of tyres where all emissions pass through control equipment that minimises emissions of dioxins and other hazardous air pollutants	D	D	D	D	D
<b>Discharge of contaminants into air from combustion activities</b>						
(A47)	Emergency generators used for the purpose of generating electricity for premises during mains power unavailability (includes operation for the purpose of generator testing and maintenance)	P	P	P	P	P

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(A48)	<p>Very small industrial, trade and institutional combustion sources fuelled by any one of the following:</p> <ul style="list-style-type: none"> <li>a) natural gas or liquefied petroleum gas up to a total gross heat release of 2MW; or</li> <li>b) wood (including untreated wood products such as wood chips and pellets) or diesel up to a total gross heat release of 500kW</li> </ul>	P	P	P	P	P
(A49)	<p>Small combustion sources established before 1 May 2014 fuelled by any of the following:</p> <ul style="list-style-type: none"> <li>a) natural gas or liquefied petroleum gas, with a total gross heat release of more than 2 and not exceeding 22MW; or</li> <li>b) diesel, with a total gross heat release of more than 500kW and not exceeding 10MW; or</li> <li>c) light or heavy fuel oil, excluding waste oil, not exceeding a total gross heat release of 10MW; or</li> <li>d) wood, including untreated wood products such as wood chips and pellets, with a total gross heat release of more than 500kW and not exceeding 5MW; or</li> <li>e) coal with a total gross heat release not exceeding 5MW</li> </ul>	P	P	P	P	P
(A50)	<p>Small combustion sources established from 1 May 2014 fuelled by any of the following:</p> <ul style="list-style-type: none"> <li>a) natural gas or liquefied petroleum gas, in a an external combustion engine/boiler with a total gross heat release of more than 2 and not exceeding 22MW; or</li> <li>b) diesel, in a an external combustion engine/boiler with a total gross heat release more than 500kW and not exceeding 10MW</li> </ul>	P	P	P	P	P

(A51)	<p>Medium combustion sources established from 1 May 2014 fuelled by any of the following:</p> <ul style="list-style-type: none"> <li>a) wood, including untreated wood products such as wood chips and pellets, in an external combustion engine/boiler with a total gross heat release of more than 500kW and not exceeding 2MW; or</li> <li>b) light fuel oil (excluding waste oil) in an external combustion engine/boiler not exceeding a total gross heat release of 10MW; or</li> <li>c) natural gas or liquefied petroleum gas in an internal combustion engine/generator, with a total gross heat release of more than 2 and not exceeding 10 MW; or</li> <li>d) diesel in an internal combustion engine/generator, with a total gross heat release of more than 500kW and not exceeding 10 MW</li> </ul>	C	C	C	C	C
(A52)	<p>Medium to large combustion sources fuelled by any of the following:</p> <ul style="list-style-type: none"> <li>a) natural gas or liquefied petroleum gas in an external combustion engine/boiler with a total gross heat release of more than 22 and not exceeding 33MW; or</li> <li>b) diesel or light fuel oil in an external combustion engine/boiler with a total gross heat release of more than 10 and not exceeding 20MW; or</li> <li>c) wood, including untreated wood products such as wood chips and pellets, in an external combustion engine/boiler with a total gross heat release of more than 2 and not exceeding 10MW; or</li> <li>d) natural gas, liquefied petroleum gas or diesel in an internal</li> </ul>	RD	RD	RD	RD	RD

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	combustion engine/generator, with a total gross heat of more than 10 and not exceeding 20MW					
(A53)	Combustion activities not meeting the permitted, controlled or restricted discretionary activity standards	D	D	D	D	D
<b>Discharge of contaminants into air from cremation and incineration processes</b>						
(A54)	Cremation of human or animal remains, excluding the burning of animal remains covered by outdoor burning rules, where discharges to air are through an afterburner	RD	RD	RD	RD	RD
(A55)	Cremation of human or animal remains not meeting restricted discretionary activity standards	D	D	D	D	D
(A56)	Flaring of gas, excluding landfill gas, including biogas and petrochemical products	D	D	D	D	D
(A57)	Incineration of non-hazardous waste, including paper, greenwaste and untreated wood waste, and excluding outdoor burning, backyard incinerators and single chamber incinerators covered by outdoor burning rules	D	D	D	D	D
(A58)	Incineration of hazardous waste excluding high temperature incineration covered by Resource Management (National Environmental Standards for Air Quality) Regulations 2004	Pr	Pr	Pr	Pr	Pr
<b>Discharge of contaminants into air from drying and kiln processes</b>						
(A59)	The baking of clay or ceramic products, including bricks or tiles with a total on-site production capacity of more than 5t/day of finished product	NC	D	D	D	D
(A60)	Drying, curing or baking of any solvent based coatings onto a surface by application of heat at a solvent volatile organic compound(VOC) application rate of less than 20kg /hour	P	P	P	P	P

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(A61)	Drying, curing or baking of any organic solvent based coating onto a surface by application of heat at a solvent VOC application rate of more than 20kg VOC/hour where discharges to air pass through an afterburner	D	RD	RD	RD	RD
(A62)	Drying, curing or baking of any organic solvent-based coating onto a surface by application of heat at a solvent VOC application rate of more than 20kg VOC/hour where discharges to air do not pass through an afterburner	NC	D	D	D	D
(A63)	Drying, curing or baking of any substance, excluding food processes and those processes covered by other rules in this section, that on heating at a rate exceeding a total on-site generating capacity of 500kW releases dust, odour or other air pollutants	D	D	D	D	D
(A64)	Heat set printing at any rate where discharges to air pass through an afterburner	RD	RD	RD	RD	RD
(A65)	Heat set printing at any rate where discharges to air do not pass through an afterburner	D	D	D	D	D
(A66)	Manufacture of synthetic wood or paper board, including hardboard, plywood or fibre board, by drying, curing or pressing wood, paper or wood or paper products through the application of heat	D	D	D	D	D
(A67)	Pulping of wood or paper products by mechanical or chemical processes, or the associated processes of bleaching or chemical or by-product recovery including recycled paper pulping	NC	D	D	D	D
(A68)	Wood or paper processing using the Kraft process	Pr	Pr	Pr	Pr	Pr

Discharge of contaminants into air from dust generating processes						
(A69)	Asbestos - extraction, processing, storage or the manufacture of products containing asbestos except where the activity is: <ul style="list-style-type: none"> <li>– associated with site remediation; or</li> <li>– removal of asbestos from existing structures; or</li> <li>– the reconditioning or placing of asbestos containing friction linings to brake or clutch assemblies; and</li> </ul> in accordance with industry best practice that is necessary to meet the requirements of the Health and Safety in Employment Act 1992	Pr	Pr	Pr	Pr	Pr
(A70)	Blasting (dry abrasive) within a permanent facility (spray booth) using abrasive material containing less than five per cent dry weight free silica	P	P	P	P	P
(A71)	Blasting (vacuum) using abrasive material containing less than five per cent dry weight free silica	P	P	P	P	P
(A72)	Blasting (sweep) using abrasive material containing less than five per cent dry weight free silica	P	P	P	P	P
(A73)	Blasting undertaken outside a permanent facility (spray booth) using abrasive material containing less than five per cent silica	RD	P	P	P	P
(A74)	Blasting (dry abrasive, vacuum or sweep) using abrasive material containing less than five per cent silica not meeting the permitted activity standards	RD	RD	RD	RD	RD
(A75)	Blasting (including dry abrasive, vacuum, and sweep) using abrasive material containing greater than five per cent silica	NC	NC	NC	NC	NC
(A76)	Cement storage, handling, redistribution, or packaging	D	P	P	P	P

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(A77)	Cement storage, handling, redistribution, or packaging that does not comply with the permitted activity standards	D	D	D	RD	RD
(A78)	Coal storage outdoors where total amount on site is not more than two tonnes	P	P	P	P	P
(A79)	Coal or coal products storage outdoors greater than two tonnes but not more than 500 tonnes; or not more than two tonnes and not meeting the general permitted activity standards	D	RD	RD	RD	RD
(A80)	Coal or coal products storage outdoors of more than 500 tonnes	D	D	D	D	D
(A81)	Demolition of buildings not meeting the general permitted activity standards	RD	RD	RD	RD	RD
(A82)	Earthworks and the construction, maintenance and repair of public roads and railways not meeting the general permitted activity standards	RD	RD	RD	RD	RD
(A83)	Manufacture of asphalt paving mix where discharges to air are through a bag filter system	D	D	RD	RD	RD
(A84)	Manufacture of asphalt paving mix where discharges are not through a bag filter system	NC	NC	D	D	D
(A85)	Manufacture of concrete at a rate up to 110 tonnes/day	P	P	P	P	P
(A86)	Manufacture of concrete at a rate of more than 110 tonnes/day where discharges to air are through a bag filter system	RD	RD	RD	RD	RD
(A87)	Manufacture of concrete at a rate of more than 110 tonnes/day where discharges to air are not through a bag filter system	D	D	D	D	D
(A88)	Other air discharges from any process that includes: a) sintering, calcining or roasting of metal ores in preparation for smelting; or b) burning of calcium or calcium	D	D	D	D	D

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	<p>magnesium carbonates to produce calcium or magnesium oxides or hydroxides (including lime manufacturing); or</p> <p>c) expansion or exfoliation of mineral; or</p> <p>d) dehydration of gypsum; or</p> <p>e) the manufacture and/or melting of glass or glass products, including vitrification, with a production capacity of greater than 1t/day; or</p> <p>f) manufacture of glass or mineral wool; or</p> <p>g) manufacture of cement or cement products from raw materials; or</p>					
(A89)	Mineral extraction activities at a rate of between five and 200 tonnes/hour	NC	RD	RD	RD	C
(A90)	Mineral extraction activities at a rate exceeding 200 tonnes/ hour from any one quarrying process	NC	D	D	D	C
(A91)	Mineral extraction activities at a rate exceeding five tonnes/ hour from any one quarrying process not complying with controlled or restricted discretionary activity standards	NC	D	D	D	D
(A92)	Temporary crushing of concrete, masonry products, minerals, ores and/or aggregates on a development site using a mobile crusher at a rate of up to 60 tonnes/hour	P	P	P	P	P
(A93)	Crushing of concrete, masonry products, minerals, ores and/or aggregates (not associated with quarrying activities) at a rate: <ul style="list-style-type: none"> <li>– greater than 60 tonnes/hour; or</li> <li>– up to 60 tonnes/hour and not meeting permitted activity standards</li> </ul>	D	RD	RD	RD	RD
(A94)	Unsealed public roads	P	P	P	P	P
<b>Discharge of contaminants into air from emergency services and the New Zealand Defence Force</b>						
(A95)	Air discharges, including outdoor burning of any material, for the purpose of fire-fighting and other emergency response activities,	P	P	P	P	P



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	carried out by the New Zealand Fire Service, Auckland International Airport Limited and the New Zealand Defence Force					
(A96)	Air discharges, including outdoor burning of any material, for the purpose of emergency service training	P	P	P	P	P
		High air quality area exceptions: permitted in the Rural – Countryside Living Zone in the Urban Fire District on properties greater than 1ha if a Council fire permit is obtained				
(A97)	Air discharges, including from outdoor burning of any material, for the purpose of fire emergency service training or investigation not meeting the permitted activity standards	RD	RD	RD	RD	RD
<b>Discharge of contaminants into air from food, animal or plant matter processes</b>						
(A98)	Alcoholic beverage production from fermentation of plant matter to produce up to 25 million l/ year or greater than 25 million l/year with the specified odour standards for permitted activities	P	P	P	P	P
(A99)	Alcoholic beverage production from fermentation of plant matter not meeting the permitted activity standards	RD	RD	RD	RD	RD
(A100)	Carpet manufacturing	D	D	D	D	D
(A101)	Coffee roasting at a loading rate of green coffee beans up to 50kg/hour and not exceeding a total weekly production of 100kg	P	P	P	P	P
(A102)	Coffee roasting at a loading rate of green coffee beans greater than 50kg/hour and not exceeding 250kg/hour	P	P	P	P	P
(A103)	Coffee roasting at a loading rate of green coffee beans of more than 250kg/hour, or less than 250kg/hour and not meeting the permitted activity standards	D	D	D	D	D
(A104)	Drying of milk products to produce milk powders	D	D	D	D	D
(A105)	Extraction, distillation or purification of animal or vegetable fats and oils	D	D	D	D	D

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(A106)	Manufacture of animal casings	D	D	D	D	D
(A107)	Manufacture of yeast or starch	D	D	D	D	D
(A108)	Pet food manufacture by the application of heat	D	D	D	D	D
(A109)	Preservation of animal hides or skins or the removal of hair, wool or feathers, (including tanneries and fellmongeries), by chemical or heat treatment	D	D	D	D	D
(A110)	Refinement of sugars, roasting or drying of berries, grains or plant matter (except roasting of coffee covered by other rules in this table), curing by smoking, flour or grain milling, deep fat or oil frying exceeding 250kg/hour of product	D	D	D	D	D
(A111)	Rendering, reduction or drying of animal matter through the application of heat	D	D	D	D	D
(A112)	Treatment of abattoir waste or abattoir wastewater on the premises	D	D	D	D	D
(A113)	Wool scouring operations or dag crushing	D	D	D	D	D
<b>Discharge of contaminants into air from mobile sources and tunnels</b>						
(A114)	Discharges to air from motor vehicles, aircraft, trains, vessels (including boats) and mobile sources not otherwise specified (such as lawnmowers), including those on industrial or trade premises (excluding tunnels) (permitted standards do not apply)	P	P	P	P	P
(A115)	Discharges to air from motor vehicle and rail tunnels established before 30 September 2013	P	P	P	P	P
(A116)	Discharges to air from motor vehicle tunnels established from 30 September 2013 with a Low or Medium Risk Rating (as assessed under Table E14.6.1.18.1 and Table E14.6.1.18.2 in Standard E14.6.1.18)	P	P	P	P	P
(A117)	Discharges to air from motor vehicle tunnels after 30 September 2013	RD	RD	RD	RD	RD

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	with a High Risk Rating (as assessed under Table E14.6.1.18.1 and Table E14.6.1.18.2 in Standard E14.6.1.18)					
(A118)	Discharges to air from rail tunnels established from 30 September 2013 that only carry electric-powered locomotives	P	P	P	P	P
(A119)	Discharges to air from rail tunnels established from 30 September 2013 that carry any diesel-powered locomotives	RD	RD	RD	RD	RD
<b>Discharge of contaminants into air from motor fuel storage</b>						
(A120)	Air discharges of volatile organic compounds (including organic solvents) from: a) dispensing of motor fuels; or b) ventilation or displacement of air or vapour from storage tanks containing motor fuels; or c) ventilation or displacement of air or vapour from motor fuel tankers (excluding petrol vapour)	P	P	P	P	P
(A121)	Air discharges of volatile organic compounds (including organic solvents) from the ventilation or displacement of air or vapour from motor fuels storage tanks or tankers, or from the dispensing of motor fuels that does not comply with the permitted standards	RD	RD	RD	RD	RD
(A122)	Petrol storage greater than one million litres on-site	RD	RD	RD	RD	RD
<b>Discharge of contaminants into air from outdoor burning</b>						
(A123)	Burning of waste, including: a) municipal, commercial, institutional, domestic or industrial wastes; or b) wood that is painted or chemically treated; or c) plastic (including agrichemical containers and silage wrap), rubber and paint; or d) sewage sludge or screenings; or	Pr	Pr	Pr	Pr	Pr

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	<p>e) motor vehicles and motor vehicle parts; or</p> <p>f) pathological, clinical or veterinary wastes; or</p> <p>g) solid, liquid or gaseous chemical wastes; or</p> <p>h) construction or demolition waste; or</p> <p>i) road seal and bitumen; or</p> <p>j) tyres; or</p> <p>k) oil (including crude oil, fuel oil sludge, waste oil, refined oil products such as diesel fuel, kerosene and motor gasoline); or</p> <p>l) fuels with more than 0.5 per cent by weight sulphur content; or</p> <p>m) coatings from wire or cable</p> <p>Excludes untreated wood, paper, greenwaste, dead on-farm animal stock and materials burnt for the purpose of emergency service training and investigation as allowed for by other rules in this table</p>					
(A124)	<p>Cooking and heating outdoors using fuels (including natural gas, liquid fossil fuels, solid fuels or untreated dry wood containing less than 25 per cent moisture) that contain less than 0.5 per cent sulphur by weight providing it does not cause offensive or objectionable smoke beyond the site boundary (includes braziers, firepits, barbecues, umus, hangis, domestic smokehouses and other ethnic cooking fires)</p>	P	P	P	P	P
(A125)	<p>Dead farm animals – outdoor burning of up to 1.5t/day</p>	Pr	P	Pr	Pr	P
		<p>High air quality area exceptions:                      Permitted in Rural – Countryside Living Zone and Rural – Rural Conservation Zone in a Rural Fire District                      Permitted in Rural – Countryside Living Zone in the Urban Fire District on properties greater than 1ha if a Council fire permit is obtained</p>				

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(A126)	Dead farm animals – outdoor burning of more than 1.5t/day	Pr	RD	Pr	Pr	Pr
		High air quality area exceptions: Restricted discretionary in Rural – Countryside Living Zone and Rural – Rural Conservation Zone in a Rural Fire District Restricted discretionary in Rural – Countryside Living Zone in the Urban Fire District on properties greater than 1ha if a council fire permit is obtained				
(A127)	Fireworks below 450kg (as net explosive quantity)	P	P	P	P	P
(A128)	Fireworks more than 450kg (as net explosive quantity)	RD	RD	RD	RD	RD
(A129)	Outdoor burning of any material required by Ministry for Primary Industries or designated authorities under the Health Act 1956 or Biosecurity Act 1993	P	P	P	P	P
(A130)	Outdoor burning of untreated wood, or paper for the purpose of controlled public displays for celebrations (e.g. Guy Fawkes bonfires)	RD	P	RD	RD	P
(A131)	Outdoor burning of untreated wood, paper, and greenwaste (that was generated on the premises where it is to be burned or on property under same ownership or operation) except where expressly allowed for by another rule in this table	Pr	P	Pr	Pr	P
		High air quality area exceptions: Permitted in Rural – Countryside Living Zone and Rural – Rural Conservation Zone in a Rural Fire District Permitted in Rural – Countryside Living Zone in the Urban Fire District on properties greater than 1ha if a council fire permit is obtained				
(A132)	Outdoor burning of untreated wood, paper, and greenwaste (not generated on the premises where it is to be burned or on a property in the same ownership or operation) except where allowed for by another rule in this table	NC	RD	NC	NC	NC
		High air quality area exceptions: Restricted discretionary in Rural – Countryside Living Zone and Rural – Rural Conservation Zone in a Rural Fire District Restricted discretionary in Rural – Countryside Living Zone in the Urban Fire District on properties greater than 1ha if a council fire permit is obtained				
<b>Discharge of contaminants into air from rural activities</b>						
(A133)	Animal feedlots for cattle	D	P	P	P	P
(A134)	Disposal of livestock and offal, using offal holes or shallow trenches	D	P	D	P	P

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(A135)	Disposal of livestock and offal using offal holes or shallow trenches not complying with the permitted activity standards	D	RD	RD	RD	RD
(A136)	Poultry hatcheries	D	P	P	P	P
(A137)	The storage and application of fertiliser (including agricultural lime)	P	P	P	P	P
(A138)	Intensive farming of up to 10,000 poultry	D	P	P	P	P
(A139)	Intensive farming of up to 10,000 poultry that does not comply with the permitted activity standards	D	RD	RD	P	P
(A140)	Intensive farming of more than 25 pig equivalents or more than 10,000 poultry that was established before 21 October 2001	C	C	C	C	P
(A141)	Intensive farming established from 21 October 2001 housing between 10,000 to 180,000 chickens	D	RD	RD	RD	RD
(A142)	Intensive farming of more than 25 pig equivalents or any number of poultry not meeting permitted, controlled or restricted discretionary standards	NC	D	D	D	D
(A143)	Intensive farming not covered by any other rule	D	D	D	D	D
(A144)	Manufacture and storage of silage	D	P	P	P	P
<b>Discharge of contaminants into air from waste processes</b>						
(A145)	Composting of refuse, waste, organic materials or green wastes where the total amount on site is not more than 10m <sup>3</sup>	P	P	P	P	P
(A146)	Composting, where the operation is not fully enclosed, of refuse, waste, organic materials excluding green wastes where the total amount on site is between 10m <sup>3</sup> and 50m <sup>3</sup>	D	P	P	P	P
(A147)	Composting, where the operation is not fully enclosed, of only greenwaste where the total amount on site is between 10m <sup>3</sup> and 100m <sup>3</sup>	D	P	P	P	P
(A148)	Composting, where the operation is fully enclosed, of refuse, waste, organic materials or green wastes	RD	P	P	P	P

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	where the total amount on site is more than 10m <sup>3</sup> and not exceeding 100m <sup>3</sup>					
(A149)	Composting where the operation is fully enclosed, of refuse, waste, organic materials or green wastes from 100m <sup>3</sup> and not exceeding 1000m <sup>3</sup>	D	RD	RD	RD	RD
(A150)	Composting – any other composting including those not meeting permitted and restricted discretionary activity standards	D	D	D	D	D
(A151)	Greenwaste collection stations	P	P	P	P	P
(A152)	Greenwaste collection stations not meeting the permitted activity standards	D	RD	RD	RD	RD
(A153)	Refuse transfer stations with up to 30m <sup>3</sup> of refuse or 500m <sup>3</sup> of green waste	D	P	P	P	P
(A154)	Refuse transfer stations with more than 30m <sup>3</sup> of refuse or 500m <sup>3</sup> of green waste	NC	C	C	C	C
(A155)	Refuse transfer stations not meeting the permitted or controlled activity standards	D	RD	RD	RD	RD
(A156)	Recycling stations where no greenwaste is collected on site	D	P	P	P	P
(A157)	Recycling stations not meeting the permitted activity standards	NC	RD	RD	RD	RD
(A158)	Landfills that ceased receiving waste materials (closed landfill) after 1 October 1991, and contained at least 200,000 tonnes of waste materials at time of closure	RD	RD	RD	RD	RD
(A159)	Landfills receiving waste material, including domestic and industrial wastes	D	D	D	D	D
(A160)	Landfills that do not comply with restricted discretionary or discretionary activity standards	NC	NC	NC	NC	NC
(A161)	Treatment of industrial, chemical, pathological or hazardous waste materials prior to disposal which are not generated on site	NC	D	D	D	D

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(A162)	Treatment of wastewater that was generated on-site (on-site wastewater treatment systems) - excluding municipal wastewater	P	P	P	P	P
(A163)	Treatment of municipal wastewater (municipal wastewater treatment plants)	D	D	D	D	D
(A164)	Disposal to ground of septage (septic tank cleanings) up to 10t/day	D	P	D	D	D
High air quality area exceptions: Permitted in Rural – Countryside Living Zone						
(A165)	Disposal to ground of treated sewage sludge (biosolids) or septage (septic tank cleanings) greater than 10t/day	NC	D	D	D	D
(A166)	Wastewater facility that is for the primary purpose of pumping or transfer or storage of raw or partially treated wastewater	P	P	P	P	P
(A167)	Wastewater facility that is for the primary purpose of pumping, or storage or transfer of wastewater and not meeting the permitted activity standards	RD	RD	RD	RD	RD
<b>Discharge of contaminants into air from other processes</b>						
(A168)	Nuclear power generation	Pr	Pr	Pr	Pr	Pr

**E14.5. Notification**

- (1) An application for resource consent for a controlled activity to discharge contaminants to air listed in Table E14.4.1 Activity table above will be considered without public or limited notification or the need to obtain written approval from affected parties unless the Council decides that special circumstances exist under section 95A(4) of the Resource Management Act 1991.
- (2) An application for resource consent for a restricted discretionary activity to discharge contaminants to air, that is listed in Table E14.4.1 Activity table above except for waste processes and rural activities, but including landfills and wastewater activities; will be considered without public or limited notification or the need to obtain written approval from affected parties unless the Council decides that special circumstances exist under section 95A(4) of the Resource Management Act 1991.



- (3) An application for resource consent for a restricted discretionary activity to discharge contaminants to air, for waste processes (excluding landfills and wastewater activities) and rural activities listed in Table E14.4.1 Activity table above will be subject to the normal tests for notification under the relevant sections of the Resource Management Act 1991.
- (4) Any application for resource consent for an activity listed in Table E14.4.1 Activity table and which is not listed in E14.5(1), (2) or (3) will be subject to the normal tests for notification under the relevant sections of the Resource Management Act 1991.
- (5) When deciding who is an affected person the Council will give specific consideration to those persons listed in Rule C1.13(4).

## **E14.6. Standards**

### **E14.6.1. Permitted Standards**

All activities listed as permitted in Table E14.4.1 Activity table must comply with the following general standards and specific standards where applicable.

#### **E14.6.1.1. General standards**

The following standards apply to all permitted activities that discharge contaminants into air except for:

- mobile sources; and
  - fire-fighting and other emergency response activities.
- (1) The discharge must not contain contaminants that cause, or are likely to cause, adverse effects on human health, property or the environment beyond the boundary of the premises where the activity takes place.
  - (2) The discharge must not cause noxious, dangerous, offensive or objectionable odour, dust, particulate, smoke or ash beyond the boundary of the premises where the activity takes place.
  - (3) There must be no, dangerous, offensive or objectionable visible emissions.
  - (4) There must be no spray drift or overspray beyond the boundary of the premises where the activity takes place.

#### **Note 1**

When making a determination of adverse effects in relation to odour and dust, the FIDOL factors (frequency, intensity, duration, offensiveness and location) should be used. The use of the FIDOL factors provides a framework for making an objective and consistent assessment in relation to the degree of effects. The nature of the zone, predominant types of activities within any given area and amenity provisions for each zone, precinct or overlay will be

taken into account when undertaking the assessment effects on the environment.

*Chemical and metallurgical processes*

**E14.6.1.2. Mechanical shredding of scrap indoors, including the mechanical removal of plastic or rubber covering from cable**

- (1) Before discharging to air, all emissions must pass through control equipment that achieves a particulate emission rate of no more than 10mg/m<sup>3</sup> (STP and dry gas basis).
- (2) Emissions control equipment must be maintained in accordance with manufacturers specifications. Where alternative maintenance programme is proposed, that programme must be certified by an independent chartered professional engineer to meet the above standards.

**E14.6.1.3. Thermal metal spraying, including the melting of any metal or metal alloy**

- (1) The process must be contained within a spray booth.
- (2) Before discharging of contaminants to air, all emissions must pass through control equipment that achieves a particulate emission rate of no more than 30mg/m<sup>3</sup> (STP and dry gas basis).

**E14.6.1.4. Spray application of surface coatings containing diisocyanates or organic plasticisers for maintenance of infrastructure**

- (1) There must be no activities sensitive to air discharges within 30m of the activity.
- (2) There must be an exclusion zone that prevents public access within 15m of the activity.
- (3) The quantity of paint containing diisocyanates or organic plasticisers applied in a continuous application at a single location must not exceed 18 litres per day.

**E14.6.1.5. Spray application of surface coatings containing diisocyanates or organic plasticisers in a spray booth**

- (1) The spray booth or room must be fitted with a suitable filter system to minimise air discharges of diisocyanates and organic plasticisers.
- (2) Vents from the spray booth or room must discharge vertically, at least 3m above the ridge height of the building and not be fitted with a cap that impedes the upward discharge of emissions.

*Combustion activities*

**E14.6.1.6. Small combustion sources established before 1 May 2014**

- (1) This rule will cease to be in effect after 30 April 2024.
- (2) The activity must have been lawfully established as a permitted activity before 1 May 2014.
- (3) Any change in the activity must not change the character or increase the scale or intensity of any adverse effects of the activity on the environment.
- (4) There must be no visible emissions resulting from the combustion process other than heat haze and clean steam during normal operation.
- (5) Air discharges must be through a stack, the height of which must be determined by the procedures set out by the NSW Environment Protection Agency Guidelines for estimating Chimney Heights for small and medium sized Fuel Burning Equipment February 1993 or if the stack height does not comply then the operator must demonstrate that the activity will not cause an exceedance of the relevant air quality standards beyond the site boundary.
- (6) Rain excluders must not impede the upward discharge of combustion gases.
- (7) Air discharges from combustion of wood, including untreated wood products such as wood chips and pellets, and coal combustion processes must discharge through particulate emissions control equipment such as a bag filter or electrostatic precipitator.
- (8) The sulphur content of the fuel must be no more than 0.5 per cent by weight.
- (9) The wood (including untreated wood products such as wood chips and pellets) must have a moisture content of less than 25 per cent by weight (dry basis).
- (10) Any wood (including wood products such as wood chips and pellets) must not be not painted, tanalised (treated with copper, chrome and arsenic) or treated with preservatives or impregnated with chemicals, including chipboard.
- (11) Maintenance of combustion appliances must occur in accordance with manufacturer's specifications and maintenance records are made available to Council officers on request.
- (12) The Council must be provided with the following information on 1 May 2016 and 1 May 2021:

- (a) location of combustion process and stack;
- (b) fuel source;
- (c) type of device and total gross heat release; and
- (d) details of any particulate emissions control employed.

Note 1

Combustion sources lawfully established as permitted activities before 30 September 2013 and in compliance with the above standard may continue until 30 April 2024. From 1 May 2024 all small combustion activities operating as a permitted activity and complying with Standard E14.6.1.6(1) must comply with Standard E14.6.1.7 or otherwise obtain resource consent.

**E14.6.1.7. Small combustion sources established from 1 May 2014**

- (1) The activity must not include internal combustion engines/generators.
- (2) There must be no visible emissions resulting from the combustion process other than heat haze and clean steam during normal operation.
- (3) Air discharges must be through a stack, the height of which must be determined by the procedures set out by the NSW Environment Protection Agency Guidelines for estimating Chimney Heights for small and medium sized Fuel Burning Equipment February 1993 or if the stack height does not comply then the operator must demonstrate that the activity will not cause an exceedance of the relevant air quality standards beyond the site boundary.
- (4) Rain excluders must not impede the upward discharge of combustion gases.
- (5) The sulphur content of the fuel is no more than 0.5 per cent by weight.
- (6) Maintenance of combustion appliances must occur in accordance with manufacturer's specifications and maintenance records must be made available to Council officers on request.
- (7) The Council must be provided with the following information on 1 May 2016 and 1 May 2021:
  - (a) location of combustion process and stack;
  - (b) fuel source;
  - (c) type of device and total gross heat release; and
  - (d) details of any particulate emissions control employed.

*Dust generating processes*

**E14.6.1.8. Blasting (dry abrasive) within a permanent facility (spray booth) using abrasive material containing less than five per cent dry weight free silica**

- (1) Emissions must pass through a filtration system that achieves a particulate emission rate of 30mg/m<sup>3</sup> (STP and dry gas basis).
- (2) Emissions control equipment must be maintained in accordance with manufacturers specifications.
- (3) A differential pressure gauge must be installed across the filtration system and the processing monitoring equipment must be fitted with audible alarms.
- (4) The control equipment and maintenance programme must be certified by an independent chartered professional engineer to demonstrate that the control equipment is adequate to meet the criteria specified standards E14.6.1.8(1) – (3).
- (5) All work areas and surrounding areas must be kept clean and substantially free of accumulations of deposited blasting material and other debris.
- (6) Abrasive material used for the blasting must contain less than two per cent by dry weight dust able to pass a 0.15 mm sieve.

**E14.6.1.9. Blasting (vacuum) using abrasive material containing less than five per cent dry weight free silica**

- (1) Material collected by the vacuum device must pass through a fabric filter or other collection system capable of achieving a non-visible discharge.
- (2) All work areas and surrounding areas must be kept clean and substantially free of accumulations of deposited abrasive blasting material and other debris.

**E14.6.1.10. Blasting (sweep) using abrasive material containing less than five per cent dry weight free silica**

- (1) All work areas and surrounding areas must be kept clean and substantially free of accumulations of deposited abrasive blasting material and other debris.

**E14.6.1.11. Blasting (abrasive) outside of permanent facility (spray booth) using abrasive material containing less than five per cent dry weight free silica**

- (1) Blasting must not be done within 50m of a public road or within 100m of an occupied building.

- (2) Waste and debris resulting from abrasive blasting must be removed from the site of the blasting to the extent practicable.
- (3) Dry abrasive blasting:
  - (a) must be done more than 1m above ground level; and
  - (b) may only be done if covers or screens are used to mitigate the effects of any contaminants discharges by the blasting.

**E14.6.1.12. Cement storage, handling, redistribution, or packaging**

- (1) Cement is stored in fully enclosed silos that must be fitted with a filtration system with a filter surface area of at least 24m<sup>2</sup>.
- (2) There should be no visible discharges of dust.
- (3) Cement must be delivered via a fully enclosed system.
- (4) Silos must either have an automated remote filling system or be fitted with a high level alarm that has both an audible and visual indicator and when the alarm is triggered it will stop the filling of the silo.

**E14.6.1.13. Temporary crushing of concrete, masonry products, minerals, ores and/or aggregates on a development site, using a mobile crusher, at a rate of up to 60 tonnes per hour**

- (1) An effective watering system must be available to minimise dust emissions.
- (2) Operation of the crusher must occur on no more than 180 days over the duration of the development project.
- (3) Temporary crushing plant must be located on a development site and must only crush material originating from and to be utilised at the development site.

**E14.6.1.14. Drying and kiln processes**

- (1) The solvent volatile organic compound application rate must be calculated from the proportion of the coating material that is a volatile organic compound (taking into account the volatility under the particular conditions of use) multiplied by the total application rate of the coating material.
- (2) For clarity, all substances that are subjected to temperatures in excess of their boiling point shall be considered volatile under the conditions of use.

*Emergency Services*

**E14.6.1.15. Burning of any material for the purpose of fire emergency service training or investigation**

- (1) All adjacent neighbours must be advised in writing at least 48 hours prior to the fire being lit.
- (2) The Auckland Council Principal Rural Fire Officer must be advised at least seven working days in writing in advance of the location and duration of the fire and the contact details of the person overseeing the fire.
- (3) The fire must be under the direction and supervision of the New Zealand Fire Service, Council fire officers or the Auckland Airport Fire Service in the case of fires at Auckland Airport.

*Food, animal or plant matter processes*

**E14.6.1.16. Coffee roasting at a loading rate of green coffee beans between 50kg/hour and 250kg/hour**

- (1) Where the operation was established prior to 1 May 2014: any change in the activity must not change the character or increase the scale or intensity of any adverse effects on the environment as a result of air discharges from the activity.
- (2) Where the operation was established, or production increased, on or after 1 May 2014 and air emissions are discharged through an afterburner:
  - (a) the afterburner must have a minimum operating temperature of 750 degrees C and a residence time of 0.5 seconds;
  - (b) the afterburner must have a temperature gauge with readout easily accessible to the operator; and
  - (c) the afterburner must be interlocked with the coffee roaster burner control or a log must be maintained which clearly documents that the afterburner temperature is operating at 750 degrees C when the temperature of the coffee beans exceeds 120 degrees C during the roasting process.

**E14.6.1.17. Alcoholic beverage production from fermentation of plant matter to produce up to 25 million l/ year or greater than 25 million l/year with the specified odour standards for permitted activities**

- (1) Odour discharges from the wort kettles (or equivalent equipment) from the fermentation of plant matter to produce more than 25 million l/year must be discharged through control equipment with an odour removal efficiency of better than 90 per cent.

**E14.6.1.18. Mobile sources and tunnels**

- (1) Table E14.6.1.18.1 Risk assessment process and Table E14.6.1.18.2 Overall risk rating are to be utilised to assess whether the proposed motor vehicle tunnel is a permitted or restricted discretionary activity.

**Table E14.6.1.18.1 Risk assessment process**

Individual Rating	Is the project in an area where PM10 National Environmental Standard Air Quality for PM10 is exceeded? OR Does the annual average nitrogen dioxide at the nearest equivalent roadside monitoring site exceed 30 µg/m <sup>3</sup> ?	How many activities sensitive to air discharges are there located within 200m of any point of discharge?	What is the annual average daily traffic flow in vehicles per day at the opening year?
Low	No	<10	<10,000
Medium	Not applicable	10-50	10,000-50,000
High	Yes	>50	>50,000

**Table E14.6.1.18.2 Overall risk rating**

Overall Rating	Individual Rating
Low	Two or more Low results in Table E14.6.1.18.1
Medium	Two or more Medium results in Table E14.6.1.18.1 OR One Low, one Medium and one High result in Table E14.6.1.18.1
High	Two or more High results in Table E14.6.1.18.1

**E14.6.1.19. Motor fuel storage**

- (1) The storage tank containing petrol must have been installed prior to 1 January 2007; or the storage tank containing petrol must have been installed or replaced (for existing tanks) from 1 January 2007, and must include measures to ensure that petrol vapour arising from storage tank filling is captured.

*Outdoor burning***E14.6.1.20. Outdoor burning of any material required by Ministry for Primary Industries or designated authorities under the Health Act 1965 or Biosecurity Act 1993 (excluding rural and quarry zones)**

- (1) All adjacent neighbours must be advised in writing at least 48 hours prior to the fire being lit.



- (2) The Auckland Council Principal Rural Fire Officer and Auckland Council Pollution Response Team must be advised in writing at least 48 hours in advance of the location and duration of the fire and the contact details of the person overseeing the fire.
- (3) The fire must be under the direction and supervision of the New Zealand Fire Service, Council fire officers or the Auckland Airport Fire Service in the case of fires at Auckland Airport.

**E14.6.1.21. Other outdoor burning and burning within a backyard or single chamber incinerator but excluding outdoor cooking and heating**

- (1) The burning must comply with Standard E14.6.1.1.
- (2) The burning must use untreated wood or vegetation that is dry and well-seasoned.
- (3) The burning must be located as far as practicable from adjacent premises.
- (4) The burning must be undertaken during daylight hours.
- (5) The burning must be supervised.
- (6) The burning must be located at least 3m from any combustible material including buildings, fences, hedges and trees.
- (7) The burning must be undertaken in accordance with any instructions provided by the manufacturer if vegetation has been treated or sprayed by an agrichemical.
- (8) The burning must be undertaken in suitable weather conditions, for example light winds.

*Waste processes*

**E14.6.1.22. Green waste collection stations**

- (1) Green wastes must be kept on-site for not more than three days from date of receipt.
- (2) There must be no shredding of green waste.

**E14.6.1.23. Refuse transfer stations where less than 30m<sup>3</sup> of refuse or 500m<sup>3</sup> of green waste is kept on site**

- (1) Green waste must be kept on-site for no more than three days from the date of receipt.
- (2) There must be no shredding of green waste.

**E14.6.1.24. Wastewater facility that is for the primary purpose of pumping or transfer or storage of raw or partially treated wastewater**

- (1) Storage of wastewater must be within an enclosed tank of less than 4000m<sup>3</sup>; or between 4000m<sup>3</sup> and 10,000m<sup>3</sup> where it is fitted with an effective odour control system such as a bio-filter.

**E14.6.2. Controlled activities**

Activities listed as controlled activities in Table E14.4.1 Activity table must comply with the following standards where applicable.

*Combustion activities*

**E14.6.2.1. Medium combustion sources established from 1 May 2014**

- (1) There must be no visible emissions resulting from the combustion process other than heat haze and clean steam.
- (2) Air discharges must be through a stack, the height of which must be determined by the procedures set out by the NSW Environment Protection Agency Guidelines for estimating Chimney Heights for small and medium sized Fuel Burning Equipment February 1993.
- (3) Rain excluders must not impede the upward discharge of combustion gases.
- (4) The wood, including untreated wood products such as wood chips and pellets, has a moisture content of less than 25 per cent by weight (dry basis).
- (5) Any wood, including wood products such as wood chips and pellets, must not be painted, tanned (treated with copper, chrome and arsenic) or treated with preservatives or impregnated with chemicals (including chipboard).
- (6) Air discharges from wood, including untreated wood products such as wood chips and pellets, combustion must discharge through particulate emissions control equipment such as a bag filter or electrostatic precipitator that achieves a maximum total suspended particulate emission rate of 50mg/m<sup>3</sup> (STP, dry gas basis, corrected to 12 per cent CO<sub>2</sub> by volume).

*Dust generating processes*

**E14.6.2.2. Mineral extraction**

- (1) The crushing of minerals and aggregates associated with a mineral extraction activity must be located at least 200m from any dwelling located outside the site zoned Special Purpose – Quarry Zone that is not under the control of the quarry operator.

*Rural activities*

**E14.6.2.3. Intensive farming indoors of more than 25 pig equivalents or more than 10,000 poultry that was lawfully established or authorised before 21 October 2001**

- (1) Any change in the activity must not change the character or increase the scale or intensity of any adverse effects of the activity on the environment.
- (2) The activity must have a management plan recording all management, operational and monitoring procedures, methodologies and contingency plans necessary to comply with this rule.

*Waste processes*

**E14.6.2.4. Refuse transfer station with more than 30m<sup>3</sup> of refuse or 500m<sup>3</sup> of green waste**

- (1) The refuse station must be located more than 300m from any dwelling or residential zone.
- (2) The premises must be in an industrial or rural area and have either:
  - (a) a minimum separation distance of 300m from any dwelling on another property or any residentially zoned area; or
  - (b) a minimum notional odour boundary of 300m through designation or an instrument registered against the land title of the owners of any residential property within 300m of the activity, and such designation or registered instrument must provide a restriction on the owners and occupiers of such land from complaining about any offensive or objectionable odour generated by the activity in respect of that property.
- (3) The refuse transfer station must be designed to ensure that litter and dust is kept to a practicable minimum and with sufficient capacity to hold all waste materials received on-site indoors or under cover, except green wastes.
- (4) All access and transfer areas must be sealed and designed with sufficient room for the movement of vehicles within the yard area.
- (5) The consent applicant must have clear protocols for:
  - (a) acceptance criteria for materials delivered to the site;
  - (b) odour, dust and litter mitigation; and
  - (c) storage, handling and disposal of all types of refuse accepted on the site.

- (6) There must be no shredding of green waste.
- (7) The activity must have an operations plan outlining the protocols developed in accordance with Standard E14.6.2.4(4) above and measures to mitigate or prevent adverse effects beyond the boundary of the premises.

### **E14.6.3. Restricted discretionary activities**

Activities listed as restricted discretionary activities in Table E14.4.1 Activity table must comply with the following standards where applicable.

#### *Combustion activities*

##### **E14.6.3.1. Medium to large combustion sources**

- (1) There must be no visible emissions resulting from the combustion process other than heat haze and clean steam.
- (2) Air discharges must be through a stack, the height of which must be determined by the procedures set out by the NSW Environment Protection Agency Guidelines for estimating Chimney Heights for small and medium sized Fuel Burning Equipment February 1993.
- (3) Rain excluders must not impede the upward discharge of combustion gases.
- (4) The wood, including untreated wood products such as wood chips and pellets, must have a moisture content of less than 25 per cent by weight (dry basis).
- (5) Any wood, including wood products such as wood chips and pellets, must not be painted, tanned (treated with copper, chrome and arsenic) or treated with preservatives or impregnated with chemicals (including chipboard).
- (6) Air discharges from combustion of wood, including untreated wood products such as wood chips and pellets, combustion must discharge through particulate emissions control equipment such as a bag filter or electrostatic precipitator that achieves a maximum total suspended particulate emission rate of 50mg/m<sup>3</sup> (STP, dry gas basis, corrected to 12 per cent CO<sub>2</sub> by volume).

#### *Cremation and incineration processes*

##### **E14.6.3.2. Cremation of human or animal remains, excluding the burning of animal remains covered by outdoor burning rules**

- (1) The crematorium must be designed so that before discharge to air, all emissions from the crematorium chamber must be contained and must pass through an afterburner.

- (2) The afterburner must be capable of maintaining all gases passing through it at a minimum temperature of 850 degrees C in greater than six per cent oxygen for a design residence time of at least two seconds.
- (3) The afterburner must have a temperature probe installed to continuously monitor and record the temperature of the waste gases in the afterburner. The stack must have an opacity meter installed to continuously monitor and record the opacity of the discharge. All process monitoring equipment must be fitted with audible alarms.
- (4) A manufacturer guarantee or certification by an independent chartered professional engineer that design of the afterburner system is adequate to meet standards E14.6.3.2(1) to (3) must be provided.
- (5) The following materials must not be burned:
  - (a) coffins constructed or furnished with PVC or melamine;
  - (b) cardboard coffins containing chlorine in the wet-strength agent;
  - (c) chlorinated plastic packaging for stillbirth, neonatal and foetal remains;
  - (d) coffins containing metals (except steel screws and staples) e.g. lead and zinc; and
  - (e) halogenates and wax.

#### **E14.6.3.3. Drying and kiln processes**

- (1) The solvent VOC application rate must be calculated from the proportion of the coating material that is a VOC (taking into account the volatility under the particular conditions of use) multiplied by the total application rate of the coating material.
- (2) For clarity, all substances that are subjected to temperatures in excess of their boiling point shall be considered volatile under the conditions of use.

#### **E14.6.3.4. Dust generating processes**

- (1) The crushing of minerals and aggregates associated with mineral extraction activity must be located at least 200m from any dwelling that is not under the control of the quarry operator.
- (2) Discharges to air from the demolition of buildings containing asbestos materials must be undertaken in a way that avoids the discharge of asbestos and provides for the health and safety of all people, including those working on the site, and in accordance with the Health and Safety in Employment Act 1992.

- (3) For discharges or dust from earthworks or road construction and maintenance that do not meet permitted activity standards, a dust management and monitoring plan must be submitted to Council. The Plan must show the means to minimise dust such that it does not cause nuisance effects beyond the boundary of the works.

*Rural activities*

**E14.6.3.5. Intensive farming established from 21 October 2001 housing between 10,000 to 180,000 chickens**

- (1) The premises, measured from the exhaust vents closest to the neighbouring site, must be located a minimum of 400m from the property boundary or notional property boundary. Notional property boundaries must be established through an instrument registered against the land title or any neighbouring property within the buffer area. Such registered instrument must provide a restriction on the owners and occupiers of such land from complaining about any offensive and objectionable odours or dust within the buffer area generated by the intensive livestock chicken farm.
- (2) There must be a management plan for the activity detailing:
  - (a) environmental objectives and targets, use of best practicable options, performance reviews, checklists;
  - (b) shed management details including ventilation and litter management;
  - (c) drinker and feeding systems operation;
  - (d) waste management and litter disposal; and
  - (e) complaints system and management including schedule of neighbouring properties and contact phone list.

**E14.6.4. Discretionary activities**

Activities listed as discretionary activities in Table E14.4.1 Activity table must comply with the following standards where applicable.

*Waste processes*

**E14.6.4.1. Discharges to air from landfills receiving waste materials, including domestic and industrial wastes**

- (1) The landfill must have been issued with resource consent or an application has been lodged to discharge contaminants into air prior to 1 January 2002 and the landfill is still receiving waste provided the footprint and contours of the landfill remain unchanged.

- (2) The landfill operation must be able to maintain a minimum separation distance of one kilometre between the landfill footprint and nearest dwelling located in the urban area and zoned for residential activities on the 21 October 2010.
- (3) The landfill operation must be able to maintain a minimum notional odour boundary of one kilometre through designation or an instrument registered against the land title of any residential property within one kilometre of the landfill footprint for the active life of the landfill. Such designation or instrument must provide a restriction on the owners and occupiers of such land from complaining about any offensive or objectionable odour generated by the landfill in respect of that property.

#### **E14.7. Assessment – controlled activities**

##### **E14.7.1. Matters of control**

The Council will reserve its control to the following matters when assessing a controlled activity resource consent application.

- (1) For discharge of contaminant into air from combustion activities:
  - (a) stack height, design and emission discharge velocity;
  - (b) fuel source, burning rate, emissions controls and maintenance; and
  - (c) duration of consent.
- (2) For discharge of contaminant into air from dust generating processes:
  - (a) location of activity and distance from activities sensitive to air discharges;
  - (b) dust mitigation measures;
  - (c) dust management plan; and
  - (d) duration of consent.
- (3) For discharge of contaminant into air from rural activities:
  - (a) location of activity;
  - (b) dust and odour mitigation methods;
  - (c) type of waste treatment; and
  - (d) duration of consent.
- (4) For discharge of contaminant into air from waste processes:
  - (a) location of activity and site layout and station design to ensure required indoor capacity and separation distances between any sensitive land uses;

- (b) protocols for waste acceptance;
- (c) odour, dust, and litter control measures;
- (d) operation plan and its adequacy; and
- (e) duration of consent.

#### **E14.7.2. Assessment criteria**

The Council will consider the relevant assessment criteria below for controlled activities.

- (1) The extent to which the discharge of contaminants into air are minimised as far as practicable, and where appropriate through:
  - (a) use of clean burning fuels;
  - (b) efficient use of energy;
  - (c) use of best practicable option emissions control; and
  - (d) minimisation of fugitive emissions.
- (2) The extent to which adverse effects on health, amenity, property and the environment are avoided, remedied or mitigated including appropriate emissions control technology and management practices.
- (3) Whether there are practicable location, method and options that cause less adverse effects on health, amenity, property and the environment and can still achieve the applicant's objectives.
- (4) Whether the duration of the consent should be limited to address:
  - (a) limitations in the existing technology and emission management systems; and
  - (b) future changes in the use and amenity of the neighbourhood.

#### **E14.8. Assessment – restricted discretionary activities**

##### **E14.8.1. Matters of discretion**

The Council will reserve its discretion to all the following matters when assessing a restricted discretionary resource consent application.

- (1) For discharge of contaminants into air from all restricted discretionary activities:
  - (a) location of site and activity; and
  - (b) site and plant layout.
- (2) For discharge of contaminants into air from chemical and metallurgical processes:



- (a) quantity, quality and type of discharges and any effects arising from that discharge;
  - (b) sensitivity of receiving environment and separation distances between the activity and any sensitive land uses;
  - (c) production capacity and material that can be burnt;
  - (d) emissions of odour, dust, visible emissions and hazardous air pollutant, including any mitigation measures;
  - (e) management plans; and
  - (f) emissions control and plant maintenance.
- (3) For discharge of contaminants into air from outdoor burning:
- (a) location of the fire and duration;
  - (b) weather conditions for the burning;
  - (c) the need for the fire and the consideration of alternatives;
  - (d) quantity and type of material to be burnt and any effects arising from the fire;
  - (e) methods to control and minimise air discharges from the fire;
  - (f) how neighbours will be informed; and
  - (g) sensitivity of downwind receiving environment.
- (4) For discharge of contaminants into air from cremation and incineration processes:
- (a) quantity, quality and type of discharge and any effects arising from that discharges;
  - (b) sensitivity of receiving environment (b) and separation distances between the activity and any sensitive land uses;
  - (c) production capacity and material that can be burnt;
  - (d) odour, dust, visible emissions and hazardous air pollutant mitigation measures;
  - (e) management plans; and
  - (f) emissions control and plant maintenance.
- (5) For discharge of contaminants into air from drying and kiln processes:

- (a) quantity, quality and type of discharge and any effects arising from that discharge;
  - (b) sensitivity of receiving environment and separation distances between the activity and any sensitive land uses;
  - (c) production capacity;
  - (d) odour, dust, visible emissions and hazardous air pollutant mitigation measures; and
  - (e) effectiveness of the afterburner for emissions control.
- (6) For discharge of contaminants into air from dust-generating activities:
- (a) quantity, quality and type of discharge and any effects arising from that discharge;
  - (b) sensitivity of receiving environment and separation distances between the activity and any sensitive land uses;
  - (c) production capacity of activity;
  - (d) dust and odour mitigation measures; and
  - (e) dust management plan and other management plans.
- (7) For discharge of contaminants into air from food, animal, or plant matter processes:
- (a) quantity, quality and type of discharge;
  - (b) sensitivity of receiving environment and separation distances between the activity and any sensitive land uses; and
  - (c) odour and dust mitigation measures.
- (8) For discharge of contaminants into air from combustion activities:
- (a) quantity, quality and type of discharge and any effects arising from that discharge;
  - (b) stack height, design and emissions discharge velocity; and
  - (c) fuel source, burning rate, emission controls and maintenance.
- (9) For discharge of contaminants into air from mobile sources and tunnels:
- (a) quantity, quality and type of discharge and any effects arising from that discharge; and
  - (b) sensitivity of the receiving environment and separation distances between the activity and any activity sensitive to air discharges.

- (10) For discharge of contaminants into air from motor fuel storage:
- (a) quantity, quality and type of discharge;
  - (b) sensitivity of receiving environment and separation distances between the activity and any sensitive land uses;
  - (c) odour mitigation; and
  - (d) risk assessment and methods to manage any residual risk.
- (11) For discharge of contaminants into air from rural activities:
- (a) quantity, quality and type of discharge and any effects arising from that discharge;
  - (b) sensitivity of receiving environment and separation distances between the activity and any sensitive land uses;
  - (c) previous complaint history;
  - (d) number of livestock;
  - (e) odour, dust, visible emissions and hazardous air pollutant mitigation measures;
  - (f) waste treatment;
  - (g) management plans; and
  - (h) emissions control and plant maintenance.
- (12) For discharge of contaminants into air from waste processes:
- (a) quantity, quality and type of discharge, including biological contaminants, and any effects arising from that discharge;
  - (b) sensitivity of receiving environment and separation distances between the activity and any sensitive land uses;
  - (c) station design and the amount of indoor capacity;
  - (d) previous complaint history;
  - (e) protocols for waste acceptance;
  - (f) odour, dust, visible emissions and hazardous air pollutant mitigation measures; and
  - (g) management plans.

### **E14.8.2. Assessment criteria**

The Council will consider the relevant assessment criteria below for restricted discretionary activities

- (1) The degree to which Auckland Ambient Air Quality Standards are likely to be met.
- (2) Whether the amount of separation between the activity discharging contaminants into air and existing or potential activities sensitive to the air discharges is sufficient to mitigate adverse effects on the environment, health and amenity.
- (3) The extent to which adverse effects are avoided, remedied or mitigated including appropriate emissions control technology and use of management practices.
- (4) Where applicable, the degree to which offsetting can remedy or mitigate adverse effects considering the proximity of the offset to where the effects of the discharge occur and the effective duration of the offset.
- (5) Whether there are practicable location and method options that cause less adverse effects and can still achieve the applicant's objectives.
- (6) The extent to which the odour and dust level meet the expectations for the Low air quality – dust and odour area (Quarry), Low air quality – dust and odour (Industry), Medium air quality – dust and odour area (Industry), Medium air quality – dust and odour area (Rural) and High air quality – dust and odour area.
- (7) Whether the assessment methods, including monitoring and modelling are appropriate to the scale of the discharge and any potential adverse effects.
- (8) Whether discharge into air are minimised as far as practicable, where appropriate through:
  - (a) use of clean burning fuels; or
  - (b) efficient use of energy; or
  - (c) use of best practicable option emissions control and management practices; or
  - (d) minimisation of fugitive emissions ; or
  - (e) reduction, reuse or recycling of waste materials relating to waste processes.

### **E14.9. Special information requirements**

There are no special information requirements in this section.