

IN THE MATTER of the Resource Management Act 1991 and the
Local Government (Auckland Transitional
Provisions) Act 2010

AND

IN THE MATTER of the Proposed Auckland Unitary Plan

**STATEMENT OF EVIDENCE OF MARK NICHOLAS ARBUTHNOT FOR
PORTS OF AUCKLAND LIMITED IN RELATION TO TOPIC 035 - AIR
QUALITY**

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EXECUTIVE SUMMARY

- A. This statement of evidence addresses the submissions and further submissions made by Ports of Auckland Limited ("**POAL**") in relation to sections C.5.1 and H.4.1 of the Proposed Auckland Unitary Plan.

C.5.1 Air Quality - Background, objectives and policies

- B. POAL has sought, and supported, several changes to the provisions of C.5.1. A number of these changes were agreed to at the mediation of this topic on 18 - 19 December. The key outstanding issues for POAL remain in relation to:
- (a) recognition of areas where reduced air quality is acceptable, due to the operational requirements of industry and other infrastructure activities (and reflection of this in Objective 1 of C.5.1);
 - (b) the imposition of stricter standards in respect of PM_{2.5} and SO₂, and in relation to offsets, than the New Zealand Ambient Air Quality Guidelines ("**NZ Guidelines**") and the New Zealand Ambient Air Quality Standards ("**NZ Standards**") (which are incorporated into the National Environmental Standard for Air Quality ("**NESAQ**")), and whether these are "justified" in the circumstances of the Auckland region;
 - (c) the application of "pass / fail" policies relating to air quality amenity to new activities that are functionally required to be located at POAL's facilities, and the lack of recognition in this respect of the reduced level of air quality amenity required for POAL to undertake its day-to-day operations; and
 - (d) the application of Policy 14 of C.5.1, which sets out matters for consideration in respect of discharge consents, only to applications for new activities, as opposed to renewals of existing air discharge consents.

- C. In my opinion, each of POAL's submission points should be accepted. In particular, it is essential that the Unitary Plan recognise that there are certain areas in which a localised reduced level of air quality amenity is required (that does not extend beyond the boundary of that area), particularly in relation to industry and other infrastructure activities. It would be inappropriate for the final Unitary Plan to include an objective requiring enhancement of poor air quality in every circumstance, essentially as an "environmental bottom line". Specifically in relation to POAL's facilities, this would compromise their ability and capacity for shipping and the day-to-day handling of bulk cargo.
- D. It is also inappropriate, in my opinion, to seek to impose stricter standards than those set out in the NZ Guidelines and NZ Standards. The Council is required, under section 32(4) of the Resource Management Act 1991 ("**RMA**") to examine whether or not more restrictive controls are "justified" in the circumstances of the Auckland region. I consider that the reasons set out in the evidence of Ms Gobby, Ms Wickham and Mr Nunns on behalf of the Council in respect of PM_{2.5} and SO₂ are insufficient to demonstrate the necessity for stricter controls in the Auckland Context. In my opinion, the Hearings Panel should accept POAL's submissions in this regard.

H.4.1 Air Quality - Rules

- E. POAL similarly sought, and supported, several changes to the provisions in H.4.1, and the following outstanding issues remain:
- (a) the location of POAL's three facilities at the Port of Auckland, Port of Onehunga and Gabador Place with the "Air Quality Reduced Amenity Area", in recognition of the operational requirements of these facilities in respect of air quality amenity; and
 - (b) the reference to "clean burning" fuels and the efficient use of energy in the restricted discretionary activity assessment criteria.

- F. Unless POAL's facilities described above are included within the "Air Quality Reduced Amenity Area", they will be required to operate within the "Air Quality High Amenity Area". In my opinion, the latter simply does not provide for the operational requirements of these facilities. For example, it is simply not practicable to avoid, remedy or mitigate all adverse effects within the immediate vicinity of the activities carried out at POAL's facilities in every instance (although POAL has measures in place to contain such discharges within the wider boundaries of their sites); nor is it possible (due to the location constraints of the three port facilities) to achieve greater separation distances from activities that are sensitive to air discharges.
- G. In this respect, POAL's relief is consistent with the provisions proposed by Council at the RPS level, and in the relevant objective and policy of C.5.1 (Objective 6 and Policy 9, as numbered in Attachment C of Ms Gobby's evidence). This issue is therefore a matter properly for consideration at the hearing of Topic 035, rather than at the hearing of the Port Precinct and Minor Port zone (as suggested by Auckland Council).
- H. In respect of the restricted discretionary assessment criteria, in my opinion, the references described above to "clean burning" fuels and the efficient use of energy are unclear, do not allow consideration of the associated costs or practicalities, and (particularly in relation to the efficient use of energy) are arguably irrelevant to the consideration of whether discharges are minimised. I consider that, consistent with the requirements of the RMA, the focus should be on whether or not the best practicable option is being employed to address the effects of a proposed discharge.

2. INTRODUCTION

- 2.1 My full name is Mark Nicholas Arbuthnot. I am a principal resource management planner at Bentley & Co Limited, an independent planning consultancy practice based in Auckland.
- 2.2 My relevant qualifications and experience are set out in my statement of evidence on behalf of Ports of Auckland Limited on Topic 005 RPS Issues.¹
- 2.3 I confirm that I have read the Expert Witness Code of Conduct set out in the Environment Court's Practice Note 2014. I have complied with the Code of Conduct in preparing this evidence and I agree to comply with it while giving oral evidence before the Hearings Panel. Except where I state that I am relying on the evidence of another person, this written evidence is within my area of expertise. I have not omitted to consider material facts known to me that might alter or detract from the opinions expressed in this evidence.'

3. SCOPE OF EVIDENCE

- 3.1 My evidence relates to POAL's primary and further submissions on parts:
- (a) C.5.1 Air Quality (objectives and policies) ("**C.5.1**"); and
 - (b) H.4.1 Air Quality (activity table, controls and assessment criteria) ("**H.4.1**");
- 3.2 In **Annexure A** to my evidence, I set out the amendments that POAL is seeking to the wording of C.5.1 and H.4.1 as set out in the primary evidence of Ms Gobby. POAL's amendments are shown in **strikethrough and underline in yellow shading**. In order to help keep the number of documents before the Panel to a minimum, I have done this by attaching the amendments agreed by the Heavy Industry

¹ See Statement of Evidence of Mark Nicholas Arbuthnot on 005 RPS Issues, dated 17 October 2014, paragraphs 1.2 – 1.8.

Group ("**HIG**") and clearly identifying where POAL is seeking amendments beyond those suggested by the HIG.

4. STATUTORY FRAMEWORK

4.1 C.5.1 and H.4.1 are identified in the Unitary Plan as being both regional plan and regional coastal plan provisions.

4.2 The purpose of a regional plan is set out in section 63 of the RMA. It is to assist a regional council to carry out any of its functions in order to achieve the purpose of the RMA, including in relation to the coastal marine area of the region.

4.3 Section 67(1) of the RMA requires that a regional plan must state:

- (a) the objectives for the region; and
- (b) the policies to implement the objectives; and
- (c) the rules (if any) to implement the policies.

4.4 Additionally, section 67(3) of the RMA requires that a regional plan must give effect to:

- (a) any national policy statement; and
- (b) any New Zealand coastal policy statement; and
- (c) any regional policy statement.

4.5 In preparing this evidence, I have had regard to:

- (a) the manner in which C.5.1 and H.4.1 give effect to the New Zealand Coastal Policy Statement ("**NZCPS**") and the Hauraki Gulf Marine Park Act 2000 ("**HGMPA**");
- (b) the manner in which C.5.1 and H.4.1 give effect to the regional policy statement of the Unitary Plan ("**RPS**"), as proposed to be amended in the evidence of Auckland Council ("**Council**") and POAL;
- (c) primary and further submissions on C.5.1 and H.4.1 by POAL, Council and other parties;

- (d) the evidence that was provided by POAL in respect of its "core theme" on Topic 005 - RPS Issues;
- (e) the evidence that was provided by POAL in respect of Topics 006 - RPS Natural Resources and 007 - RPS Climate Change;
- (f) the outcomes of the expert conferencing of Topic 035 – Air Quality on 1 and 17 December 2014;
- (g) the outcomes of the mediation of Topic 035 – Air Quality on 18 and 19 December 2014;
- (h) the statement of primary evidence of Louise Isabel Gobby on behalf of Council dated 9 February 2015;
- (i) the statement of primary evidence of Louise Fleur Wickham on behalf of Council dated 9 February 2015;
- (j) the statement of primary evidence of Lauren Nicole Jones on behalf of Council dated 9 February 2015; and
- (k) the statement of primary evidence of Peter Gordon Rogan Nunns on behalf of Council dated 9 February 2015.

4.6 In preparing this evidence, I have had regard to section 32 of the RMA, which requires an evaluation of the objectives, policies and methods in C.5.1 and H.4.1. I have also had regard to section 32AA of the RMA, which requires a further evaluation for any changes that have been proposed to C.5.1 and H.4.1 since the original evaluation report under section 32 of the RMA was completed.

4.7 In particular, in relation to section 32AA, my evidence below has had regard to the changes that have been proposed by POAL, the Council and other submitters to a level of detail that corresponds to the scale and significance of the change that has been sought. Accordingly, where I consider that a significant change has been proposed to C.5.1 and H.4.1, I have undertaken a specific analysis below of that change as per the requirements of section 32AA.

5. C.5.1 AIR QUALITY (OBJECTIVES AND POLICIES)**Background***Primary submission of POAL (5137-123)*

- 5.1 In its primary submission on the background section to C.5.1 (5137-123), POAL sought the following amendments:

Auckland's urban areas are the main focus of the Unitary Plan's objectives and policies relating to the management of air quality. This reflects the higher numbers of people that are impacted by sources of air pollution in the urban area. Higher population densities, together with mixed residential, commercial and industrial land uses and the high numbers of vehicles means there needs to be a greater focus on both the management of individual discharges from various sources and the separation of incompatible land uses and activities. There are also industrial processes that cannot avoid discharging contaminants into the air and their operation needs to be recognised and supported. Therefore, their effects need to be managed using suitable control technology, on-site management techniques and by locating such industries in appropriate areas.

Motor vehicles are the largest contributor to air pollution in Auckland. Motor vehicle emissions are very difficult to control or contain, and degraded air quality, as a result, has adverse impacts on human health, ecosystems and amenity values. It is recognised that minimising the discharge of contaminants to air through regulation is more effectively undertaken at a national level rather than at a regional level. The Unitary Plan has taken an approach to permit vehicle discharges, encourage best practice and educate the community on methods to minimise any discharges. Location of sensitive activities with respect to transport sources will become increasingly important with a growing population.

Domestic home heating is a large source of emissions in winter and emissions are targeted for improvement, for example by the use of new and more efficient solid fuel burning appliances.

- 5.2 The purpose of the submission was to better reflect the activity status of vehicle emissions in the Unitary Plan, and the fact that national regulation should be the tool for dealing with motor vehicle emissions.
- 5.3 Paragraphs 4.7 to 4.8 and 4.24 to 4.26 of my primary evidence on Topic 006 – RPS Natural Resources set out the reasons why, in my opinion, the regulation of vehicle emissions needs to be addressed at a national level, as opposed to a regional level. I do not intend to repeat this evidence, except to state that motor vehicles frequently

cross regional boundaries and, in my opinion, it is inappropriate (and impracticable) for Council to seek to regulate such emissions at a regional level.

- 5.4 At the mediation of this topic on 18 – 19 December 2014, the relief sought by POAL was agreed with the Council and all parties present, with some minor amendments. I confirm that I am satisfied with the minor amendments, and will address any further amendments in respect of this matter within my rebuttal evidence, if necessary.

Primary submission of POAL (5137-124)

- 5.5 POAL also sought in its primary submission (5137-124) that the background to C.5.1 be amended to recognise that some areas of the CMA are actively used for port-related activities, some of which may give rise to intermittent or on-going discharges to air that are of an industrial nature, and give rise to localised impacts on air quality amenity values.
- 5.6 In response to the relief that was sought by POAL in its primary submission (5137-124), the following amendments to the background of C.5.1 were agreed at the mediation of this topic on 18 – 19 December 2014:

In many parts of Auckland's CMA, the effects of air discharges are highly localised and usually temporary in nature. In the rural areas low densities of development do much to provide adequate separation to manage the effects of contaminants on human health and neighbourhood amenity values, provided good on-site management practices are carried out and inappropriately located residential and countryside living development is avoided.

However some activities such as mineral extraction activities and ports do not have a choice in terms of location. Other sources of emissions such as significant infrastructure may require large sites and buffer distances not readily available in urban areas. In all of these cases discharges of an industrial nature may occur in close proximity to sensitive land uses such as residential areas and there may be potential localised impacts on air quality and amenity.

- 5.7 I confirm that I am satisfied with the minor amendments, and will address any further amendments in respect of this matter in my rebuttal evidence, if necessary.

Objectives

POAL's further submission in opposition (in part) to submission point 6523-38 by Federated Farmers of New Zealand

- 5.8 POAL made a further submission opposing (in part) the primary submission of Federated Farmers of New Zealand (6523-38), which sought that the objectives and policies of C.5.1 be retained as notified, to the extent that POAL has sought a number of amendments to these provisions to provide for existing and future marine and port activities.

Objective 1 of C.5.1

Primary submission of POAL (5137-125)

- 5.9 In its primary submission (5137-125), POAL sought the following amendment to Objective 1 of C.5.1:

1. Air quality is maintained in those parts of Auckland that have excellent or good air quality, and air quality is enhanced in those parts of Auckland where it is poor, while recognising that enhancing air quality in some areas of Auckland is not appropriate due to operational requirements of industry and other infrastructure activities.

- 5.10 The reason stated by POAL for the relief sought was that:

Objective 1 is too absolute in requiring air quality to be enhanced in parts of Auckland where the air quality is poor. It must be recognised that reduced air quality is acceptable in some parts of Auckland where operational requirements of industry and other infrastructure activities necessitates lower air quality standards. In these locations it is not practicable to enhance air quality due to operational requirements of industry and other infrastructure activities.

- 5.11 POAL's relief (5137-125) was not agreed by Council at the mediation of this topic on 18 – 19 December 2014. Instead, Council prefers the insertion of the following additional objective:

6. The operational requirements of location specific industry, significant infrastructure and mineral extraction activities are provided for and the adverse effects of their air discharges on human health, property and the environment are managed.

- 5.12 In preferring the insertion of Objective 6, the evidence of Ms Gobby states that:

- 10.7 The Council has acknowledged the need to more explicitly recognise and provide for the operational requirements of industry, significant infrastructure and mineral extraction activities by the inclusion of a new objective 6 in C.5.1 which addresses these activities.
- 10.8 I do not support including qualifiers such as where practicable, or additional clauses that constrain this [objective 1]. In my opinion objectives should state outcomes, which are then implemented by the policies and rules. The resource consent process provides the opportunity to assess practicability on a case by case basis.
- 10.9 The proposed new objective 6 addresses industry, significant infrastructure and mineral extraction submitters' concerns that the Unitary Plan is required to have regard to the operational requirements of those groups. The proposed objective 6 achieves this as it provides "the coat hanger" on which the industrial air discharges policies hang. I also do not accept submitters' requests to delete references to adverse effects of industrial type discharges being managed. The policies and rules set out how the adverse effects of air discharges are managed and objective 6 should acknowledge this.
- 5.13 I do not agree with the manner in which Council proposes to address POAL's submission (5137-125). As notified, Objective 1 of C.5.1 is aspirational in nature. While it may be the Council's intent that the objective be aspirational (and not necessarily achieved in all cases), the inclusion of such an objective at the regional plan level means that it will apply to individual sites (including those located within Heavy or Light Industrial zones, the Port Precinct, or Minor Port zones) and activities that require a reduced level of air quality amenity in order to operate in an efficient and effective manner.
- 5.14 While Auckland Council has attempted to provide for the operational requirements of location-specific industry, significant infrastructure, and mineral extraction activities through the proposed Objective 6 of C.5.1, the manner in which the objectives are drafted is such that Objective 1 could read as a "bottom line" (in a similar manner as to how policies 11(a), 13(1)(a), and 15(a) of the NZCPS have been interpreted through the NZKS decision). On its face, it is less directive than Objective 1, therefore my concern is that Objective 6 of C.5.1 (as proposed by Council) will be required to be read as being subservient to, and being subject to achieving the outcomes of Objective 1.

5.15 In her statement of primary evidence, Ms Gobby disagrees that such an outcome will occur for the following reasons:

10.11 Submitters are also concerned about the encapsulation of heavy industry and other similar activities in the requirement to enhance air quality where it is poor. In my opinion, this general objective is qualified by the more specific recognition of reduced air quality in heavy industry zones in objective 7. I understand from discussions with officers at the Council that there is a progressive enhancement of air quality in heavy industry areas, through the use of improved technology and site management practices. Therefore encouraging enhancement of poor air quality is not inconsistent with what is actually happening on the ground.

5.16 I disagree with the opinion of Ms Gobby in respect of this matter. Objective 1 goes beyond "encouraging enhancement of poor air quality". It requires such an outcome to be achieved in every circumstance and does not provide for localised reductions in air quality amenity. Therefore, it is my opinion that this objective could be interpreted as an "environmental bottom line", which all other objectives and policies are subservient to. The fact of the matter remains that POAL requires a localised *reduced* level of air quality amenity to operate (that does not extend beyond the boundary of the site). Objective 1 as currently drafted has the potential to constrain the efficient operation of POAL's port facilities, and compromise its capacity for shipping and the day-to-day handling of bulk cargo.

5.17 For these reasons, the insertion of Objective 6 as a "stand alone" objective does not adequately address POAL's primary submission (5137-125). I consider that the relief that is sought by POAL more appropriately enables the consent authority to take into consideration the operational requirements of certain industry or infrastructure activities when assessing effects on ambient air quality.

5.18 The HIG (of which POAL forms part) has proposed the following relief [shown in **highlight** and **underline**] in respect of Objective 1 of C.5.1:

1. Ambient Air quality is maintained in those parts of Auckland that have excellent or good air quality, and ambient air quality is enhanced in those parts of Auckland where it is poor **and it has adverse effects on human health**.

5.19 I confirm that should POAL's primary relief not be accepted by the Hearings Panel, the alternative relief of the HIG would adequately address POAL's concerns in this regard.

Objective 2 of C.5.1

Primary submission of POAL (5137-126)

5.20 In its primary submission, POAL sought the deletion of the reference to PM_{2.5} from Objective 2 of C.5.1 as follows:

2. Air discharges, including PM₁₀—and—PM_{2.5} (particulate pollution, or particulate matter), are reduced to protect public health and amenity, and to meet national and Auckland Ambient Air Quality Standards (AAAQS) in Table 1.

5.21 POAL's reasons were:

The PM_{2.5} standard is not the New Zealand Standard for measuring the particulate content of air discharges, which is PM₁₀. It is inappropriate to impose stricter standards on particulate discharges in Auckland, than are applied to business and industry in other areas of New Zealand. Imposing stricter controls that industry in Auckland must comply with will increase costs, and cause Auckland businesses to struggle to compete with similar businesses in other regions. Therefore the references to PM_{2.5} should be deleted from the proposed Plan.

5.22 The above relief that was sought by POAL was not agreed at the mediation of this topic on 18 – 19 December 2014.

5.23 Paragraphs 4.4 to 4.6 of my primary evidence on Topic 006 – RPS Natural Resources set out the reasons why I do not consider it appropriate to impose stricter standards (in relation to PM_{2.5}) than the New Zealand Ambient Air Quality Guidelines ("**NZ Guidelines**") and New Zealand Ambient Air Quality Standards ("**NZ Standards**"), which are incorporated into the National Environmental Standard for Air Quality ("**NESAQ**"). I do not intend to repeat this evidence, except to state that the imposition of the PM_{2.5} standards has the potential to increase compliance costs for businesses and industry, which in turn has the potential to adversely affect the region's economy. In addition, some businesses may seek to locate to other regions of New Zealand that are not subject to such restrictions.

- 5.24 Under section 32(4) of the RMA, the Council is required to examine whether or not the more restrictive controls are "justified" in the circumstances of the Auckland region. As discussed in my statement of rebuttal evidence on Topic 006 – RPS Natural Resources, in my opinion, the term "justified" is a high threshold.
- 5.25 POAL's submission is not specifically addressed in the evidence of Ms Gobby. Instead, justification for the proposed 24-hour and annual AAAQS for the discharge of PM_{2.5} is addressed generally in the evidence of Ms Wickham.
- 5.26 Ms Wickham makes reference (at paragraph 5.7) to an apparent "gap" in the NZ Standards and NZ Guidelines, where not all pollutants or time averages relevant to Auckland are covered, including short-term (daily) or long-term (annual) exposure to PM_{2.5}. As discussed in my statement of rebuttal evidence on Topic 006 – RPS Natural Resources, I consider that the fact that the Ministry for the Environment considered including PM_{2.5} in its 2011 review of the NESAQ, but chose not to do so, is evidence that such a regional control is not justified.
- 5.27 The Updated Health and Air Pollution in New Zealand Study 2012 ("**HAPINZ**") (which is relied upon in the primary evidence of Ms Peterson for Council in relation to Topic 006 – Natural Resources, to evidence the health effects from fine particulates in Auckland) advises that:
- Although PM_{2.5} rather than PM₁₀ is increasingly used in overseas assessments, there is insufficient information currently available in New Zealand to undertake a robust assessment of PM_{2.5} effects².
- 5.28 I also refer to the expert evidence of Ms Simpson called by POAL on this topic, who likewise considers that PM_{2.5} should not be controlled in New Zealand.

² Kuschel et al. (2012). *Updated Health and Air Pollutants in New Zealand Study Volume 1: Summary Report*; G. Kuschel, J. Metcalfe, E. Witton, J. Guria, S. Hales, K. Rolfe and A Woodward; Health Research Council of New Zealand, Ministry of Transport, Ministry for the Environment, and New Zealand Transport Agency; March 2012.

- 5.29 While Ms Wickham makes reference (paragraph 5.16) to PM_{2.5} being classified by the International Agency for Research on Cancer ("**IARC**") as a contaminant of concern, this in itself is not "justification" with reference to section 32(4) of the RMA for a standard that is more stringent than the NZ Guidelines and NZ Standards. In this regard, while new international studies are cited by Ms Wickham as having "linked long-term exposure to PM_{2.5} to new health outcomes including atherosclerosis, adverse birth outcomes and childhood respiratory disease", no similar studies have been cited in the context of the Auckland region (or New Zealand for that matter). In my opinion, Auckland Council has not been able to establish that exposure to PM_{2.5} within the context of the Auckland region, is of such significance that a more stringent standard than the NZ Guidelines and NZ Standards is "justified".
- 5.30 In the same vein, the "seriousness of adverse health impacts caused by air pollution" that is referred to in paragraph 5.21 of Ms Wickham's evidence is not demonstrated with respect to PM_{2.5} in the context of the Auckland region.
- 5.31 The evidence of Ms Wickham confirms (at paragraph 5.30) that there are no recorded exceedances of the annual PM_{2.5} levels in Auckland at any of the monitoring locations across Auckland. While Auckland Council has published estimated conservative annual PM_{2.5} 'background' levels for the Auckland region, where seven census area units may equal or exceed the proposed annual AAAQS for PM_{2.5} the results appear to all be caused by sources that are not (or cannot be) controlled by the Unitary Plan: transport and shipping. In my opinion, this further indicates that controls on PM_{2.5} are not justified in the Auckland region.
- 5.32 The evidence of Mr Nunns seeks to provide a cost-benefit analysis in respect of the implications of imposing a stricter standard in respect of PM_{2.5} than the NZ Guidelines and NZ Standards. While Mr Nunns makes reference to the beneficial health effects in respect of particle emissions, he also concludes that:

1.3 Air quality monitoring data suggest that most parts of the Auckland region meet the new Auckland Ambient Air Quality Standards (AAAQS) in the Proposed Auckland Unitary Plan (Unitary Plan) for particles with a diameter of 2.5 microns or less (PM_{2.5}), nitrogen dioxide (NO₂) and sulphur dioxide (SO₂). Moreover, the data show that concentrations have generally been trending down in recent decades, or, in the case of NO₂, plateauing.

5.33 In my opinion, the fact that most parts of the Auckland region already meet the AAAQS for PM_{2.5}, and the fact that concentrations have generally been trending down means that the issue of PM_{2.5} discharges are not as significant in the Auckland region as suggested by Council, and therefore do not justify the imposition of a stricter standard than the NZ Guidelines and NZ Standards.

5.34 Furthermore, I do not consider that Mr Nunns has considered the full costs to industry in achieving compliance with the proposed PM_{2.5} standards. In this regard, Mr Nunns appears only to have taken into account the costs associated with offsetting emissions by replacing woodburners or woodfires, and has not taken adequate consideration of the costs to the Auckland region's economy of existing or new businesses relocating elsewhere in New Zealand (to areas where there are no similar constraints), stating simply that (at paragraph 9.19):

...employment or economic output in one industrial sector may be reduced, but this will be counterbalanced by an increase in another sector. Likewise, if Unitary Plan offset requirements result in some businesses choosing locations outside the Auckland urban airshed, it will not necessarily reduce employment or economic output in New Zealand as a whole.

5.35 The implication of Mr Nunns' evidence is that there will be a potential decline of heavy industry within the Auckland region as a result of the imposition of a stricter standard than the NZ Guidelines and NZ Standards in respect of PM_{2.5}. This will be to the detriment of the Auckland region's economy. The fact that there may be an increase in employment within "another sector" does not, in my opinion, counterbalance the effects on the Auckland region in terms of the loss of diversity of job and business opportunities that are currently available, and the potential loss of skills from the region's economy.

- 5.36 The primary evidence of Mr Akehurst on behalf of POAL has addressed this matter further. I do not intend to repeat that evidence here, except to state that I agree with Mr Akehurst's conclusions that the overall outcome is that the economy may be smaller than it would otherwise have been as a result of the inclusion of PM_{2.5} as a stricter control than the NZ Guidelines, NZ Standards and the NESAQ.
- 5.37 I have also read the primary evidence of Ms Simpson on behalf of POAL on this topic, which comments as to why the air quality standards for the Auckland region should be the same as the NZ Guidelines and NZ Standards that are incorporated into the NESAQ. I do not intend to repeat this evidence; however, I consider that Ms Simpson's evidence demonstrates that the inclusion of PM_{2.5} as a stricter control than the NZ Guidelines, NZ Standards and the NESAQ is not necessary in the context of the Auckland region. To this end, I consider that more restrictive controls are not "justified" with reference to section 32(4) of the RMA.

Objective 4 of C.5.1

Further submission of POAL in support of the primary submission of Trustpower Limited (5230-37)

- 5.38 POAL made a further submission in support of the primary submission (5230-37) of Trustpower Limited ("**Trustpower**"), which sought the following amendment to Objective 4 of C.5.1:
4. Industrial and rural activities are located within appropriate zones, to recognise the benefits of these activities and provide for them, and to avoid, remedy or mitigate the adverse effects from air discharges on human health, property and the environment.

- 5.39 Trustpower's reasons were:

Objective 4 of Section 5.1 is supported by Trustpower. However, the latter half of the objective does not accurately reflect the management approach set out in Chapter B, Section 6.1.

In particular, Chapter B, Section 6.1, Objective 4 seeks that adverse effects are avoided, remedied or mitigated whilst its accompanying policy (Chapter B, Section 6.1, Policy 4) only seeks the avoidance of 'significant' adverse effects on human health.

In light of the above, Objective 4 should be amended to direct that actual or potential adverse effects are avoided, remedied or mitigated (in a manner consistent with Chapter B, Section 6.1).

5.40 In response to the Trustpower's primary submission (5230-37), the following amendment was agreed at the mediation of this topic on 18 – 19 December 2014:

4. Industrial and rural activities are located within appropriate zones, to recognise the benefits of these activities and provide for them, and to ~~avoid-manage~~ adverse effects from air discharges on human health, property and the environment.

5.41 I agree with the mediated outcome of Objective 4. I consider that the objective as originally notified was too absolute, as it would have effectively prohibited *any* adverse effects on the environment from air discharges. It would also have removed the ability of the consenting authority to consider appropriate management techniques that could be put in place to address the effects of air discharges, which are necessary and unavoidable for certain types of industry or infrastructure activities.

Policy 4 of C.5.1

Primary submission of POAL (5137-127)

5.42 In its primary submission (5137-127), POAL sought the deletion of Policy 4(d) regarding air quality effects from urban and marine activities as follows:

4. Manage the air quality amenity in the CMA and urban areas by:
 - a. avoiding offensive or objectionable odour, dust, particulate, ash, smoke, fumes, overspray and visible emissions
 - b. avoiding any significant adverse effects from industrial or rural activities air discharges
 - c. having adequate separation distances and best management practices for industrial or rural activities
 - ~~d. minimising adverse air quality effects from urban and marine activities.~~

5.43 POAL's reasons were:

The effect of clause (d) is unclear. In this context, "marine activities", which are not defined in the proposed Plan, may be given the same meaning as "marine and port activities", which is defined in the proposed Plan. This would be inappropriate as many discharges from marine and port activities are permitted activities under the proposed Plan and/or regulations. In particular, minimising adverse air quality effects from marine activities could be interpreted as including discharges to air from mobile sources such as shipping, which Auckland Council is prohibited from controlling in its plans by the Resource Management (Marine Pollution) Regulations 1998. It is inappropriate to control discharges from mobile sources such as ships, as these discharges are more appropriately regulated at the national level (for the reasons set out above in respect of motor vehicle emissions in row 9). Clause (d) should accordingly be deleted.

5.44 POAL's relief was accepted at the mediation of this topic on 18 – 19 December 2014, together with the following amendments to address the submissions of other parties:

4. Manage the air quality amenity in the CMA and urban areas by:
 - a. avoiding, remedying or mitigating adverse effects of air discharges from all activities including offensive or objectionable odour, dust, ~~particulate, fumes, smoke,~~ ash, ~~smoke, fumes,~~ overspray and visible emissions
 - ~~b. avoiding any significant adverse effects from industrial or rural activities air discharges~~
 - ~~e-b. having adequate separation distances between air discharges and sensitive activities and best management practices for industrial or rural activities~~
 - ~~d. minimising adverse air quality effects from urban and marine activities.~~

5.45 At paragraph 12.1, the evidence of Ms Gobby proposes the following further amendments to Policy 4 of C.5.1 in response to the POAL's primary submission (5137-127) (shown in ~~striketrough~~ and underline in red), to recognise the varying air quality amenity in Urban Areas and the differences in air quality amenity between the general CMA and locations where industrial activities are undertaken.

4. Manage areas of high-the air quality amenity in the CMA and in urban areas by:
 - a. avoiding, remedying or mitigating adverse effects of air discharges from all activities including offensive or objectionable odour, dust, ~~particulate, fumes, smoke,~~ ash, ~~smoke, fumes,~~ overspray and visible emissions
 - ~~b. avoiding any significant adverse effects from industrial or rural activities air discharges~~
 - ~~e-b. having~~ requiring adequate separation distances between activities which have air discharges and

~~sensitive activities sensitive to air discharges and best management practices for industrial or rural activities~~

~~d. minimising adverse air quality effects from urban and marine activities.~~

5.46 I confirm that I agree with the further amendments proposed by Ms Gobby to Policy 4 of C.5.1, and will address any further amendments in respect of this matter in my rebuttal evidence, if necessary.

5.47 The HIG largely agrees with the proposed amendments of Ms Gobby. However, it has also proposed the following further amendments [shown in highlight and strikethrough] in respect of Policy 4 of C.5.1:

4. Manage ~~areas of high~~ the air quality amenity in the CMA and ~~in~~ urban areas by:

a. ~~avoiding, remedying or mitigating adverse effects of air discharges from all activities including offensive or objectionable odour, dust, particulate, fumes, smoke, ash, smoke, fumes, overspray and visible emissions~~

~~b. avoiding any significant adverse effects from industrial or rural activities air discharges~~

~~c. b. having requiring adequate separation distances between activities which have air discharges and sensitive activities sensitive to air discharges and best management practices for industrial or rural activities~~

~~d. minimising adverse air quality effects from urban and marine activities.~~

5.48 Criterion "b" has been subsumed into Policy 8, which is a discrete policy relating to separation discharges for all activities. I support the additional relief that is sought by the HIG in this respect, and consider it an appropriate outcome.

Policy 6 (now Policy 7) of C.5.1

Primary submission of POAL (5137-128)

5.49 In its primary submission (5137-128), POAL sought that Policy 6 (now Policy 7) of C.5.1 be excluded from applying to the Port Precinct and Minor Port zones. (That policy relates to reduced air quality amenity in the Heavy Industry and Quarry zones.)

5.50 Following the mediation of this topic on 18 - 19 December 2014, I confirm that POAL's concerns in respect of this policy have been

addressed, and that it no longer wishes to pursue its relief in this regard.

- 5.51 However, POAL does not wish to withdraw this submission point at this stage. This is to ensure that POAL has scope should any changes be pursued by other submitters and/or recommendations by the Panel adversely affect POAL's interests.

Policy 7 (now Policy 8) of C.5.1

Primary submission of POAL (5137-128)

- 5.52 In its primary submission, POAL sought that Policy 7 (now Policy 8) of C.5.1 (which relates to separation distances between activities with air discharges and sensitive activities) be excluded from applying to the Port Precinct, Port of Onehunga, and Gabador Place facilities, for the following reasons:

POAL is concerned that as currently drafted, Policy 7 may be interpreted as requiring either separation to be provided between its operations and sensitive activities from within the balance of the Port, Port of Onehunga and Gabador Place Precincts; or as a mechanism to restrict the type of activities that are provided for (and currently occur) within those precincts. Such an interpretation would be inconsistent with the purpose, objectives and policies of these areas; however to avoid future interpretation issues, this policy should be excluded from applying to the Port Precinct, Port of Onehunga Precinct and Gabador Place Precinct.

Given that POAL undertakes a wide range of activities that could potentially be considered industrial air discharges in the CMA, this policy should be excluded from applying to the Port, Port of Onehunga and Gabador Place Precincts. In terms of the Port Precinct specifically, while this policy does not apply to significant infrastructure like the Port of Auckland, air discharges are appropriate in the CMA at the Port of Auckland by virtue of its historic location in [the] CMA, rather than because the CMA provides an adequate separation [distance] between the Port and other activities (as provided for under clause b).

- 5.53 I agree with POAL's submission (5137-128) and the reasons given. The issue for POAL arises because, in the notified provisions, the Port of Auckland and the Minor Port zone are identified as being located within the "Air Quality High Amenity Area", which is the same as that which applies to Residential zones and the City Centre zone.

5.54 POAL's relief in respect of Policy 7 (now Policy 8) of C.5.1 is not specifically addressed in the evidence of Ms Gobby. However, in relation to Policy 6 (now Policy 7) of C.5.1 (paragraph 14.4), Ms Gobby confirms that she does not agree to the exclusion of POAL's three port facilities from specific air quality amenity policies. Ms Gobby gives the following reasons:

...I do not support changes to Policy 7 [Policy 6 as notified] which deals with reduced air quality amenity in heavy industry zones to exclude the three port areas. Each of these areas has different zone notations reflecting in part their location and function and the type of land uses around them. For example the Port of Auckland forms part of the City Centre zone, while Gabador Place is zoned Minor Port. I consider that decisions should be made to the air quality amenity or separation distance policies. The air quality provisions need to reflect the range of activities with air discharge envisaged in the different zones.

5.55 I assume that the above evidence applies equally to Policy 7 (now Policy 8), and that Ms Gobby does not support the exclusion of Policy 7 (now Policy 8) of C.5.1 from the Port Precinct and the Minor Port zone.

5.56 Following the mediation of this topic on 18 – 19 December 2014, Ms Gobby's evidence recommends the following further amendments to Policy 7 (now Policy 8) (shown in red) to address the concerns that were expressed by members of the HIG:

~~7-8.~~ Maintain adequate separation distances between activities with air discharges and those sensitive to air discharges by:

- a encouraging heavy industry that requires an air discharge consent to locate in Heavy Industry zones ~~and be separated by an appropriate separation~~ separation distance of at least 500m from zones providing for activities sensitive to air discharges; ~~and~~
- b not allowing new activities with discharges to air that are likely to have adverse effects to locate in zones where activities sensitive to air discharges are permitted activities, unless it can be shown that adverse effects can be avoided, remedied or mitigated and the air quality amenity provisions of the zone are met.
- ~~c.~~ recognising that, other than air discharges from road tunnels, mobile source discharges are controlled at source by other methods at the national level.
- ~~e.d~~ not allowing activities including heavy industry that require air discharge consents to locate in ~~the Air Quality Industry Transition overlay, or~~ Light Industry zones, unless it can be shown that adverse

effects on activities sensitive to air discharges can be avoided, remedied or mitigated and the air quality amenity provisions of the zone are met.

e. discouraging activities sensitive to air discharge from locating in areas adjacent to reduced air quality amenity areas. When rezoning within 500m of a reduced air quality amenity area, this includes considering the extent to which the new zone is likely to create reverse sensitivity effects on existing activities within the reduced air quality amenity area and the efficient and effective functioning in that area.

- 5.57 In my opinion, Policy 7(b) (now Policy 8(b)) above has the effect of "not allowing" (or in other words prohibiting) any new activities with air discharges to locate in the Port Precinct unless it can be demonstrated that the adverse air discharge effects can be avoided remedied and mitigated and the air quality amenity provisions of the zone are met. Subsection (b) would apply because the Port Precinct forms part of the City Centre zone, where activities sensitive to air discharges (albeit outside of the Port Precinct) are permitted activities (for example residential activities).
- 5.58 The implication of such a policy is that activities (such as, for example, the transfer of bulk cargo including gypsum or iron sand) that are functionally required to locate within the Port Precinct would no longer be able to operate. They cannot reasonably or practicably meet the "Air Quality High Amenity Area" standards, because they require localised discharges of dust to occur as part of their operation. This is despite those sensitive activities that the policy is seeking to protect not actually being allowed in the Port Precinct, and the effects of air discharges from Port-related activities being confined to the Port Precinct boundaries. This is clearly an unacceptable outcome for the Port.
- 5.59 Additionally, Policy 7 (now Policy 8) is expressed in "pass/fail" terminology, and does not enable an assessment of the effects of the infringement to occur. Such policy wording is, in my opinion, inappropriate, particularly given the wide range of fully discretionary activities that are provided for within H.4.1 of the Unitary Plan (which would therefore be subject to this policy).

5.60 In the event that POAL's primary submission is not accepted (and Policy 7 (now Policy 8) of C.5.1 is applied to the Port Precinct, Port of Onehunga, and Gabador Place facilities), it will be necessary to include the Port Precinct and the Minor Port zone within the "Reduced Air Quality Amenity Area" (consistent with POAL's submission point 5137-134, discussed further within paragraphs 5.1 to 5.12 of this statement of evidence).

5.61 The HIG has also proposed the following amendments to Policy 7 (now Policy 8) (shown in underline and ~~strikethrough~~ in highlight and red) to address the concerns that have been raised by Industry submitters:

~~7-8.~~ Maintain adequate separation distances between activities with air discharges and those sensitive to air discharges by:

a encouraging heavy industry that requires an air discharge consent to locate in the Heavy Industry zones ~~or the Reduced Air Quality Amenity Overlay, and be separated by an appropriate separation distance of at least 500m from zones providing for activities sensitive to air discharges; and~~

b ~~not allowing discouraging~~ new activities with discharges to air that are likely to have adverse effects to locate in zones where activities sensitive to air discharges are permitted activities, unless it can be shown that adverse effects can be avoided, remedied or mitigated and the air quality amenity provisions of the zone are met.

c. recognising that, other than air discharges from road tunnels, mobile source discharges are controlled at source by other methods at the national level.

~~e.d not allowing activities including heavy industry that require air discharge consents to locate in the Air Quality Industry Transition overlay, or Light Industry zones, unless it can be shown that adverse effects on activities sensitive to air discharges can be avoided, remedied or mitigated and the air quality amenity provisions of the zone are met.~~

e. discouraging activities sensitive to air discharge from locating in areas or adjacent to reduced air quality amenity areas. When rezoning within 500m of a reduced air quality amenity area, this includes considering the extent to which the new zone is likely to create reverse sensitivity effects on existing activities within the reduced air quality amenity area and the efficient and effective functioning in that area.

8A. Require new activities that have air discharges that move beyond the boundary of the air quality amenity areas to meet the air quality amenity provisions of the adjacent zone, when measured at the boundary of the adjacent zone.

5.62 I consider that the HIG's proposed amendments to Policy 7 (now Policy 8) and proposed Policy 8A of C.5.1 removes the "pass/fail" terminology, and better enables an assessment of the effects of the infringement to occur. That said, amendments to Policy 7 (now Policy 8) and proposed Policy 8A of C.5.1 do not address POAL's primary submission, which is that it requires a reduced level of air quality amenity in order to undertake its day-to-day operations. Accordingly, while I support the HIG amendments, I prefer POAL's primary relief, which is that Policy 7 (now Policy 8) and Policy 8A (as proposed by the HIG) be excluded from applying to the Port of Auckland, Port of Onehunga and Gabador Place.

5.63 Should the Panel accept POAL's primary submission point 5137-134, and locate the Port Precinct and the Minor Port zone within the "Reduced Air Quality Amenity Area", I confirm that Policy 7 (now Policy 8) and Policy 8A (as proposed by the HIG) can be appropriately applied to the Port of Auckland, Port of Onehunga and Gabador Place.

Policy 8 (now Policy 9) of C.5.1

Primary submission of POAL (5137-128)

5.64 In its primary submission (5137-128), POAL sought that Policy 8 (now Policy 9) of C.5.1 (shown below) be excluded from applying to the Port Precinct and Minor Port zones.

5.65 I confirm that POAL no longer wishes to pursue its relief in respect of Policy 8 (now Policy 9), subject to the following minor amendment (shown in underline in red), which clarifies what seems to be the intent of Policy 9 - that not every criterion is required to be met:

9. Avoid industrial air discharges in rural areas and the CMA except where:
 - a. the activity is location-specific, such as mineral extraction activities, wastewater treatment facilities, marine and port activities and activities undertaken by the New Zealand Defence Force for training and munitions testing: or

- b. the activity is significant infrastructure requiring large separation distances that cannot be provided for within urban areas; or
- c. the activity is a rural industry.

5.66 However, POAL does not wish to withdraw its submission point at this stage. This is to ensure that POAL has scope should any changes be pursued by other submitters and/or recommendations of the Panel that may adversely affect POAL's interests.

Policy 9 (as notified) of C.5.1 (high traffic generating activities)

Primary submission of POAL (5137-129)

5.67 In its primary submission, POAL sought the deletion of Policy 9 of C.5.1 (as notified), which related to high traffic generating activities for the following reasons:

POAL opposes this policy. Discharges from mobile sources (including motor vehicles) are classified as a permitted activity in the proposed Plan. Therefore it is inappropriate to require permitted air discharges from vehicles to be assessed, modelled and monitored as part of any land use application. No legitimate resource management purpose is served by requiring applicants for land use activities to monitor effects associated with a permitted activity.

Also, this policy appears to require resource consent applicants to model and monitor the discharges from vehicles driving to the applicant's activity, ie POAL would be required to model and monitor the discharges from freight movements to and from the Port of Auckland. POAL has never been required to undertake such a task, and queries how it could ever be efficiently and usefully achieved. The assessment would involve significant time and costs with ultimately no real purpose, as applicants have little, if any, control over the results, as those who deliver freight to and from the Port of Auckland have the right to choose their type of vehicles, fuel, etc. Therefore, the policy should be deleted.

5.68 I agree with the submission of POAL in this regard. Paragraphs 4.40 to 4.41 of my statement of primary evidence, and paragraphs 2.13 to 2.14 of my statement of rebuttal evidence, on Topic 006 – RPS Natural Resources set out the reasons why I consider Policy 9 of C.5.1 (as notified) to be inappropriate. I do not intend to repeat that evidence here, except to state that Policy 9 (as notified) has the potential to result in undue and unworkable requirements being placed on discretionary or non-complying applications for resource consent.

5.69 With the exception of Valerie Cole (who did not make a submission on this policy), Auckland Regional Public Health Service, and Sky Cabs, the deletion of Policy 9 (as notified) sought by POAL (5137-129) was accepted by the parties that attended the mediation of Topic 035 – Air Quality on 18 – 19 December 2014. Should alternative relief be sought to Policy 9 of C.5.1 (as notified) by other submitters that were not present at the mediation, those matters will be addressed within my rebuttal evidence, if necessary.

Policy 10 of C.5.1

Primary submission of POAL (5137-130)

5.70 In its primary submission, POAL sought that Policy 10 be retained as notified. At the mediation of this topic on 18 and 19 December 2014, the following amendments were proposed by Progressive Enterprises Limited ("**Progressive**"), but were not agreed by Auckland Council:

10. Avoid or minimise adverse effects from motor vehicle emissions on activities sensitive to air discharges by separating ~~sensitive these~~ activities from ~~significant motor vehicle emission sources identified strategic traffic routes and arterial traffic routes~~.

5.71 In response to the submission of Progressive, the evidence of Ms Gobby proposes the following amendments to Policy 10 of C.5.1:

10. Avoid or minimise adverse effects from motor vehicle emissions on activities sensitive to air discharges by separating these activities from significant motor vehicle emission ~~sources generated on roads identified in the Air Quality Transport Corridor Separation overlay~~.

5.72 For completeness, I agree with the amended Policy 10 that is contained within Ms Gobby's evidence, and consider that it appropriately clarify the outcomes that are intended by the objectives, policies, rules, and assessment criteria of the Air Quality Transport Corridor Separation overlay.

Policy 14 of C.5.1

Further submission of POAL in support of the primary submission of DB Breweries Limited (4868-5)

5.73 Policy 14 as notified under the Unitary Plan reads as follows:

14. Require individual sources of any discharge to air to demonstrate where relevant to the discharge type and reasonably practicable:
 - a. low-emission fuels are used
 - b. energy is efficiently used
 - c. best practicable option is used
 - d. fugitive emissions are minimised'
 - e. risk and adverse effects on people, property and the environment from hazardous air pollutants are avoided
 - f. the amenity provisions of any zone where the discharge is having an effect are met
 - g. recognised best-practice management and emission control standards are met
 - h. there are adequate separation distances to activities sensitive to air discharges
 - i. significant adverse effects on flora and fauna, particularly where they are food sources or in areas identified as SEAs both on land and in the CMA are avoided.

5.74 POAL made a further submission in support of the primary submission of DB Breweries ("**DB**") (4868-5), which sought to amend Policy 14 of C.5.1 such that it only applies to applications for new activities that require air discharge consent, as opposed to renewals of existing air discharge consents.

Further submission by POAL in support of the primary submission of Trustpower Limited (5230-40)

5.75 POAL also made a further submission in support of Trustpower's primary submission (5230-40), which sought to amend Policy 14(e) (now Policy 14(d)) to enable risk and adverse effects from hazardous air pollutants on people, property and the environment to be remedied or mitigated, as opposed to solely being required to be avoided.

Mediation of Topic 035 – Air Quality on 18 and 19 December 2014

5.76 At the mediation of this topic on 18 and 19 December 2014, the following amendments to Policy 14 of C.5.1 were discussed:

- ~~14.15.~~ Require individual sources ~~of any for any new consent~~ to discharge to air to demonstrate where relevant to the discharge type and reasonably practicable that:

- a. low-emission fuels are used
- b. energy is efficiently used
- ~~c. best practicable option is used~~
- ~~d.c.~~ fugitive emissions are minimised
- ~~e.d.~~ risk and adverse effects on people, property and the environment from hazardous air pollutants are avoided, remedied or mitigated
- ~~f.e.~~ the amenity provisions of ~~any all relevant zones where the discharge is having an effect~~ are met
- ~~g.f.~~ recognised best practicable option-practice management and emission control standards are employed-met
- ~~h.g.~~ there are adequate separation distances to activities sensitive to air discharges
- ~~i.h.~~ ~~significant~~ adverse effects on flora and fauna, particularly where they are food sources or in areas identified as SEAs both on land and in the CMA are avoided, remedied or mitigated.

5.77 With the exception to the amendment to criterion "e" (now criterion "d") of C.5.1, which enables risk and adverse effects from hazardous air pollutants on people, property and the environment to be remedied or mitigated, as opposed to solely being required to be avoided, the above amendments were not agreed to by the parties that attended mediation.

5.78 Following the mediation, the evidence of Ms Gobby proposes the following amendments to Policy 14 of C.5.1 to respond to the issues that have been raised by submitters:

- 14. Require individual sources of any discharge to air to demonstrate where relevant to the discharge type and reasonably practicable that:
 - a. clean-burning low-emission fuels are used
 - b. energy is efficiently used
 - ~~c. best practicable option is used~~
 - ~~d.c.~~ fugitive emissions are minimised'
 - ~~e.d.~~ risk and adverse effects on people, property and the environment from hazardous air pollutants are avoided
 - ~~f.e.~~ the amenity provisions of any zone where the discharge is having an effect are met
 - ~~g.f.~~ recognised best available-practice management practices and best practicable option—and emission control standards are employed-met
 - ~~h.g.~~ there are adequate separation distances to activities sensitive to air discharges

~~i-h. significant~~ adverse effects on flora and fauna, particularly where they are food sources or in areas identified as SEAs both on land and in the CMA are avoided, remedied or mitigated.

5.79 In response to the submission of DB (4868-5), which sought to amend Policy 14 of C.5.1 so that it only applies to applications for new activities that require air discharge consent, as opposed to renewals of existing air discharge consents, the evidence of Ms Gobby states:

18.5 I do not agree with the request be submitters that policy 14 should only apply to new air discharge consents. The matters set out in the policy are relevant in the consideration of renewals of air discharge consents, particularly when consents are being given for longer time periods. New technology and new management practices may identify new approaches to the management of an individual air discharge.

5.80 In my opinion, it is entirely appropriate to limit the "scope" of Policy 14 of C.5.1 to applications for new activities that require air discharge consent, as opposed to renewals of existing air discharge consent, as sought by DB and supported by POAL. Specifically, Policy 14 does not enable an applicant for a renewal of an existing air discharge consent to take into consideration the level of investment that has been made in the existing activity, or the ability to invest in the upgrade of plant and machinery over time to meet the wider objectives and policies of this section of the Unitary Plan.

5.81 In addition, I agree with the amendment sought by DB to Policy 14(e) (now Policy 14(d)) of C.5.1. I consider it essential for the Unitary Plan to enable risk and adverse effects from hazardous air pollutants to be remedied or mitigated, as opposed to being avoided in all circumstances. To do otherwise may result in a situation whereby a consent authority will be unable to grant resource consent for an air discharge, even though the adverse effects on people, property and the environment have been assessed to be minor or less than minor.

Policy 18 of C.5.1

Further submission by POAL in support of the primary submission of Stevenson Group Limited (3682-64)

- 5.82 POAL made a further submission in support of the primary submission of Stevenson Group Limited ("**Stevenson Group**") (3682-64), which sought to delete the reference to the AAAQS from Policy 18(a) of C.5.1.
- 5.83 No agreement could be reached as to the deletion of the reference to the AAAQS from Policy 18(a) of C.5.1 at the mediation of this topic. However, the evidence of Ms Gobby (at paragraph 20.1) proposes the following amendments to Policy 18 of C.5.1 in response to the relief that is sought by Transpacific Industries Group (New Zealand) Limited (877-23):
18. Require applications for activities requiring resource consent for air discharges to:
 - a. ~~demonstrate that the discharges will not cause ambient air quality to exceed have combined concentrations arising from the air discharge activity and background levels below~~ the AAAQS in Table 1
 - b. show how the amenity provisions of the zone, and any adjacent zone where there are effects from the activity, are met
 - c. assess air discharges using ~~best practice~~ methods, such as modelling and monitoring, appropriate to the scale of the discharge and any potential adverse effects
 - d. demonstrate best ~~available practice~~ management ~~practices~~ including minimising discharges
 - e. demonstrate that the chosen method and amount of discharge does not have a practicable alternative that causes ~~fewer-less~~ adverse effects
 - f. demonstrate that the location of the activity and any discharge is suitable to avoid, ~~remedy or mitigate~~ adverse effects on the environment, health and amenity especially on sensitive activities
 - g. provide details of how the offsets policy will be met, where relevant
 - h. avoid, remedy or mitigate any cumulative adverse effects
 - i. demonstrate that any risk to people and property has been adequately avoided or mitigated
 - j. demonstrate that adequate separation distances are available ~~for the duration of the consent to~~

ensure that adverse effects on health and amenity of activities sensitive to air discharges are avoided
or mitigated

- k. assess the potential for reverse sensitivity effects to occur.

5.84 Overall, Ms Gobby considers (paragraph 20.2) that the amendments to Policy 18:

- (a) clarifies the scope of the policy;
- (b) introduces consistent wording; and
- (c) removes inappropriate or impracticable matters that were contained within the notified version.

5.85 Ms Gobby has also relied on the evidence of Ms Wickham to support the retention of the AAAQS within Policy 18(a). Paragraphs 4.20 to 4.36 of my statement of evidence set out in detail why I consider that the inclusion of PM_{2.5} within the AAAQS is not "justified" with reference to section 32(4) of the RMA.

5.86 In respect of the new 24-hour SO₂ standard that is proposed within the AAAQS, the evidence of Ms Wickham (paragraph 5.37) relies on the 2006 World Health Organisation ("**WHO**") global air quality guideline, but acknowledges that the ambient air quality monitoring and inventory for Auckland confirms that "most residential locations in Auckland would easily meet the proposed standard".

5.87 In Ms Wickham's opinion:

5.38 The 24-hour AAAQS for SO₂ is therefore, reasonable on a precautionary basis. Being easy to meet in most locations it will not provide additional health benefits. However, it will future proof public health for future generations and support the Auckland Plan vision of being the most liveable city in the world.

5.88 The evidence of Mr Nunns (paragraph 8.16) provides further confirmation of the limited extent to which there is an issue in respect of 24-hour SO₂ levels within the Auckland Region:

...The available monitoring data suggests that 24-hour average SO₂ concentrations meet the proposed AAAQS in all areas except the Auckland waterfront...

- 5.89 In the context of the Auckland waterfront, discharges of SO₂ from vessels in the CMA are exempt from control under the Resource Management (Marine Pollution) Regulations 1998. In my opinion, the fact that the available monitoring data suggests that 24-hour SO₂ concentrations meet the proposed AAAQS in all other areas of Auckland, combined with the fact such controls will not provide additional public health benefits (as Ms Wickham confirms), and the fact that Council is unable to control discharges from vessels, demonstrates that the proposed 24-hour SO₂ standard within the AAAQS is unnecessary. This is consistent with the amendments that were agreed by Council as part of Topic 006 – RPS Natural Resources, where Policy 2(d) of B.6.1 (which seeks to "advocate for reductions in sulphur dioxide emissions from marine sources") was deleted and replaced by a non-regulatory method.³
- 5.90 The fact that a more stringent SO₂ control can be readily complied with and will "future proof public health for future generations and support the Auckland Plan vision of being the most liveable city in the world" is not, in my opinion, "justification" for a more stringent control than the NZ Guidelines and NZ Standards in the context of section 32(4) of the RMA. I find Ms Wickham's assertion that the 24-hour AAAQS for SO₂ is reasonable on a precautionary basis to be similarly unconvincing, particularly given that the Council accepts that the control will not provide additional health benefits.⁴
- 5.91 Furthermore, an independent technical review of the scientific research behind the WHO's decision to amend its 24-hour mean ambient air quality guideline for SO₂ prepared for Council by URS New Zealand Limited ("**URS**") confirms that:⁵

The proposed 24-hour mean AAAQS for SO₂ of 20µg/m³ represents a significant tightening of the existing [Regional Ambient Air Quality Target] of 120µg/m³. The proposed change to the 24-hour standard/target represents an absolute

³ See page 3 of Attachment A to Auckland Council's closing statement for Topics 006/007.

⁴ Statement of Evidence of Louise Wickham, at [5.38].

⁵ Pg.15; An Independent Technical Review of the Scientific Research Behind the World Health Organisation's Decision to Amend its 24-hour Mean Ambient Air Quality Guideline for Sulphur Dioxide; prepared for Auckland Council by URS New Zealand Limited; August 2013

change (reduction) of $100\mu\text{g}/\text{m}^3$, and would signify a reduction of 83%. The justification for the proposed change is to bring the regional standards/targets in line with the [WHO] ambient air quality guidelines...

- 5.92 A full copy of the URS report is appended as **Annexure B** to this statement of evidence. In terms of how the WHO's air quality guidelines ("**AQG**") are intended to be applied by governmental and regulatory authorities in New Zealand and worldwide, the independent technical review of URS for Council advises that while many countries worldwide, including New Zealand, do not have enough data on ambient concentrations of SO_2 and potential public health outcomes due to inhalation exposure (and that the WHO AQG may therefore be the only feasible scientific support for their policies):⁶

... it is worth pointing out that the basis for the revision to the 24-hour AQG for SO_2 was largely based on results from a single intervention study undertaken in Hong Kong (Hedley *et al.*, 2002)...

- 5.93 The independent technical review of URS for Council advises that notwithstanding that the WHO's 24-hour mean ambient air quality guideline for SO_2 is based on the 2002 intervention study that was undertaken in Hong Kong by Hedley *et al.*, the 2014 ambient air quality standards for Hong Kong have in fact adopted a less stringent 24-hour SO_2 threshold concentration of $125\mu\text{g}/\text{m}^3$ (Hong Kong has adopted a range of alternative standards to address the health effects of SO_2 discharges).⁷
- 5.94 The URS review also undertook a detailed examination of a wider range of studies relating to a number of different areas, including London, 12 Canadian cities, 126 USA metropolitan areas, Germany and the Netherlands. Taking into account all of those studies the conclusion was the same: there is considerable uncertainty in respect of the health effects associated with exposure to SO_2 for periods over one hour.⁸

⁶ Pg.19; An Independent Technical Review of the Scientific Research Behind the World Health Organisation's Decision to Amend its 24-hour Mean Ambient Air Quality Guideline for Sulphur Dioxide; prepared for Auckland Council by URS New Zealand Limited; August 2013

⁷ Pg.20; *Ibid*

⁸ Pg.32; *Ibid*.

5.95 In terms of the public health effects associated with exposure to SO₂, the independent technical review of URS for Council concludes that:⁹

...Worldwide, there is currently a significant shortfall in the amount [of] data available for cohort studies for PM_{0.1} (as both mass and particle number concentration), PM_{2.5} and SO₂, and there simply are insufficient data available to undertake cohort studies of the impacts associated with public exposure to SO₂ and/or PM_{0.1}, PM_{2.5} and SO₂, using either personal exposure monitoring data or ambient air quality monitoring data.

5.96 The independent technical review of URS for Council goes on to advise that:¹⁰

Upon reflection of the entire literature reviewed in the present study for Auckland Council, there is still some considerable uncertainty as to whether SO₂, over exposure periods greater than 1 hour, is the pollutant responsible for the observed adverse health effects or whether it is a surrogate for [ultra-fine particles], PM_{2.5} or another correlated substance, such as sulphates or transition metals.

5.97 Its conclusion is that:¹¹

Based on this review, the adoption of the 24-hour WHO AQG of 20µg/m³ as an AAAQS for the Auckland region is not expected to provide a significant health benefit to Aucklanders, and may be at an unnecessary burden (cost) to industry at the present time. In fact, there may be a greater benefit to public health if Auckland Council were to adopt a more stringent 1-hour standard for SO₂ (e.g. 200µg/m³), although this would require further research. URS also suggested that a 10- or 15 minute AAAQS of 500µg/m³ may be more effective at reducing public health effects than a 24-hour AAAQS, based on current knowledge.

5.98 Overall, having regard to all of the above matters, as well as the expert evidence presented on this topic by Ms Simpson, I am of the opinion that until such time as Council is able to quantify the actual health effects of PM_{2.5} and 24-hour SO₂ concentrations on the Auckland region, and demonstrate how more restrictive controls will address such health effects, a more restrictive regime under the AAAQS is not "justified" in respect of this matter with reference to section 32(4) of the RMA.

⁹ Pg.30; Ibid.

¹⁰ Pg.32; An Independent Technical Review of the Scientific Research Behind the World Health Organisation's Decision to Amend its 24-hour Mean Ambient Air Quality Guideline for Sulphur Dioxide; prepared for Auckland Council by URS New Zealand Limited; August 2013.

¹¹ Pg.39; Ibid.

Policy 23 (now Policy 21 and Policy 22) of C.5.1*Primary submission of POAL (5137-131)*

5.99 In its primary submission, POAL sought the deletion of all references to PM_{2.5} from Policy 23 of C.5.1.

5.100 In the evidence of Ms Gobby, Policy 23 of C.5.1 has been deleted and replaced with the following:

21. Provide for new significant discharges of PM₁₀ by giving effect to the requirements of Regulation 17 of the Resource Management (National Environmental Standard for Air Quality) Regulations 2004 for offsets of PM₁₀.

a In addition to the requirements of Regulation 17 PM₁₀ offsets are also required:

i. if the airshed is polluted as defined in Regulation 17(4) of the Resource Management (National Environmental Standard for Air Quality) Regulations 2004; and

ii. if the discharge to be expressly allowed by the consent is new, or increased above previously consented levels for that site; and

iii. if the discharge to be expressly allowed by the consent exceeds 4 tonnes per year of PM₁₀.

b Under this policy PM₁₀ offsets must be calculated:

i. on an annual mass discharge basis and be offset on a one to one annual mass discharge basis; and

ii. as if all discharges of PM₁₀ are equal irrespective of source; and

iii. assuming that all total suspended particulate (TSP) is PM₁₀ unless demonstrated otherwise.

c For the purpose of this policy PM₁₀ offsets must be given to as close as practicable to where the effects of the discharge occur.

22. Provide for new significant discharges of PM_{2.5} by requiring offsets in polluted airsheds, but only if Policy 23 is not required:

a if the airshed is not polluted as defined in Regulation 17(4) of the Resource Management (National Environmental Standard for Air Quality) Regulations 2004; and

b if the airshed's 5-year rolling average exceedances of PM_{2.5} is greater than the permissible number of exceedances in column 4 of Table 1 for PM_{2.5}; and

c if the discharge to be expressly allowed by the consent is new, or increased above previously consented levels for that site; and

d if the discharge to be expressly allowed by the consent would be likely at any time to increase the concentration of PM_{2.5} (calculated as a 24-hour mean) by more than 1.25µg/m³ in any part of the airshed (other than the site on which the consent would be exercised) at locations where people may reasonably be exposed or if discharges from the site exceed 2 tonnes per year of PM_{2.5}.

e Under this policy PM_{2.5} offsets must be calculated:

i. on an annual mass discharge basis and be offset on a one to one annual mass discharge basis; and

ii. as if all discharges of PM_{2.5} are equal irrespective of source.

f For the purpose of this policy PM_{2.5} offsets must:

i. be given effect to as close as practicable to where the effects of the discharge occur; and

ii. take effect within 12 months after the consent is granted and be effective for the remaining duration of the consent.

5.101 The evidence of Ms Gobby does not address proposed Policy 21 and Policy 22 of C.5.1, except to state that the provisions are discussed within the evidence of Ms Wickham.

5.102 I have reviewed the evidence of Ms Wickham in respect of proposed Policy 21 of C.5.1, which confirms that the policy restates the offset requirements of Regulation 17 of the NESAQ, with the exception of criterion (a)(iii) in respect of the four tonne threshold, which is more stringent than the NESAQ (as permitted by Regulation 28).

5.103 The evidence of Ms Wickham provides the following justifying for the proposed the imposition of a more stringent requirement than the NESAQ in respect of this matter:

8.8 As outlined in the evidence of Mr Nunns, the health benefits (in terms of avoided health costs) of the proposed PM₁₀ offset policy substantially outweigh the likely costs to emitters of new discharges. The offsets policies specifically provide for new entrants to the airshed and thus provide for economic growth but not at the expense of people's health or the environment. The new (more stringent) four tonne threshold seeks to make the PM₁₀ offset policy fairer so that industry cannot 'game' the rules. It is thus a more efficient and effective policy than that required by the NESAQ.

5.104 In my opinion, the fact that Council does not agree with manner in which the offsets policy of the NESAQ is required to be administered

(refer to paragraph 8.5 of the evidence of Ms Wickham) is not "justification" to have a more stringent offsetting policy in the Auckland region than is provided in the NESAQ. In other words, Ms Wickham's general concerns with the manner in which the NESAQ offsetting regime is implemented relate to the application of the NESAQ nationwide. They are not concerns that arise specifically in the Auckland region, and are therefore arguably more appropriately dealt with at the next review of the NESAQ.

- 5.105 Turning to proposed Policy 22 of C.5.1, my statement of evidence has set out in detail why I do not consider the imposition of a control on the discharge of PM_{2.5} is "justified" with reference to section 32(4) of the RMA.
- 5.106 Even if such a policy were to be applied to the Auckland region, the mandatory nature of it is of significant concern, as the implication is that every new industrial activity that results in discharges of PM_{2.5}, or any existing industry that seeks to increase such discharges, will be required to undertake some form of offsetting.
- 5.107 The evidence of Mr Akehurst has reviewed the cost-benefit analysis that has been prepared by Mr Nunns in respect of the proposed offsetting policies that are contained within C.5.1, and concludes that the evidence of Mr Nunns does not appear to account for the fact that the offsetting process will result in the same levels of pollutants in the air shed. As a result, differences in health outcomes are likely to be driven by the location of air discharges in respect of resident or daytime populations, as opposed to the actual volume of pollutants. In this regard, the evidence of Mr Akehurst does not consider that Mr Nunns has calculated the health benefits to the Auckland region in this manner, and therefore questions the accuracy of Mr Nunns' conclusions.
- 5.108 Having regard to the evidence of Mr Akehurst, I do not consider that Council has taken into account the full costs and benefits of proposed Policy 22 of C.5.1 in their analysis. In my opinion, given that HAPINZ concludes that there is currently insufficient information available in

New Zealand to undertake a robust assessment of PM_{2.5} effects on health, it cannot be reasonably concluded that "the health benefits (in terms of avoided health costs) of the proposed PM_{2.5} offset policy substantially outweigh the likely costs to emitters of new discharges".¹²

- 5.109 I therefore do not support proposed Policy 22 of C.5.1, and consider that it should be deleted.

Table 1 of C.5.1

Primary submissions of POAL (5137-132 and 5137-133)

- 5.110 In its primary submissions, POAL sought the deletion of the reference to PM_{2.5} (5137-132), and an amendment to the 24-hour average sulphur dioxide standard from 20µg/m³ to 120µg/m³ to match that of the NZ Standards and NZ Guidelines (5137-133).
- 5.111 The relief sought by POAL was not accepted by Council at the mediation of this topic on 18 and 19 December 2014.
- 5.112 My statement of evidence has set out in detail why I consider that the imposition of more stringent requirements in respect of PM_{2.5} and 24-hour SO₂ concentrations than the NZAAQ is not "justified" with reference to section 32(4) of the RMA.
- 5.113 To this end, I support the relief that is sought by POAL (5137-132 and 5137-133), and consider that it would more appropriately give effect to the sustainable management purpose of the RMA.

6. H.4.1 AIR QUALITY (RULES)

Activity Table

Primary submission of POAL (5137-134)

- 6.1 In its primary submission (5137-134), POAL sought that the activity table in H.4.1 be amended to provide for its three port facilities at the

¹² Wickham at paragraph 8.13

Port of Auckland, Port of Onehunga and Gabador Place as being within the "Air Quality Reduced Amenity Area".

- 6.2 POAL's relief is necessary as the air quality amenity areas that are contained within the activity table to H.4.1 are derived from the underlying zoning of the land or CMA, as opposed to being applied as an overlay to areas that contain land uses that require specific levels of air quality amenity (either high or reduced).
- 6.3 While Council has effectively provided POAL's three facilities at the Port of Auckland, Port of Onehunga and Gabador Place with their own spot-zoning (in recognition of the location-specific requirements of the facilities), they have not sought to provide for a corresponding level of air quality amenity that will occur as a result of the activities that have been provided for within the Port Precinct and Minor Port zone.
- 6.4 As a consequence of not being zoned "Heavy Industry", the Unitary Plan requires POAL to operate within the "Air Quality High Amenity Area". Paragraphs 2.4 to 2.7 of the evidence of Mr Kirk for POAL in respect of Topic 006 – RPS Natural Resources provides an explanation of the air quality amenity requirements of POAL's port-related activities, including why it is not economic or practicable to undertake such activities outside of the Auckland region. While I do not intend to repeat that evidence here, it confirms that while no odours are emitted from the Port of Auckland, localised dust emissions can occur from time to time in relation to, for example, the unloading of gypsum for onward transportation to South Auckland. Such emissions are internalised within the Port boundaries, and POAL has a series of measures in place to ensure that dust emissions are minimised.
- 6.5 The "Air Quality High Amenity Area" does not provide for the operational requirements of POAL's three port facilities in respect of air quality amenity, and does not achieve the sustainable management purpose of the RMA. For example, it is simply not practicable for POAL to avoid, remedy or mitigate all adverse effects of air discharges (dust and other visible emissions) within the

immediate vicinity of the activity in every instance (although POAL has measures in place to contain such discharges within the wider boundaries of their sites); nor is it possible (due to the location constraints of the three port facilities) to achieve greater separation distances from activities that are sensitive to air discharges (Policy 5, now Policy 4 of C.5.1).

6.6 The evidence of Ms Simpson (at section 3) sets out in detail the reasons why it is necessary to provide for a reduced level of air quality amenity at POAL's three port facilities to enable their day-to-day activities to be undertaken. I do not intend to repeat that evidence here, except to state that I agree with Ms Simpson, and consider that the relief that is sought by POAL (5137-134) is necessary to achieve the sustainable management purpose of the RMA.

6.7 The primary submission of POAL (5137-134) is addressed in the evidence of Ms Gobby, who states in her executive summary:

1.4 Some decisions on the appropriate air quality amenity level for areas such the three Ports of Auckland sites (Auckland, Onehunga and Gabador Place) should await decisions on the final zoning of these areas.

6.8 I do not agree that it is appropriate to defer the decision on POAL's primary submission (5137-134) until after the hearing of the Port Precinct and Minor Port zone. The issue as to whether or not three port facilities at the Port of Auckland, Port of Onehunga and Gabador Place should be located within the "Air Quality Reduced Amenity Area" has nothing to do with the underlying zoning of the land and CMA, and everything to do with the location-specific operational requirements of POAL, which require a reduced level of amenity within the coastal environment to operate efficiently on a day-to-day basis.

6.9 In my opinion, it is essential that the Unitary Plan expressly provides for the reduced air quality expectations of POAL's port facilities. Such an outcome is entirely consistent with RPS Objective 3 and Policy 5(a) of B.6.1 (as proposed by Council in the evidence of Ms Gobby dated 4 November 2014), which state:

3. The air discharge requirements of significant infrastructure and industry are provided for by enabling reduced air quality amenity in appropriate locations.

...

5. Manage the discharge of contaminants to air from the use and development of the land and coastal marine area in a manner that provides for different levels of amenity according to the purpose of the zone and the predominant types of activities within any given area, and in particular:
 - a allow for reduced air quality amenity in
 - i. industrial areas and the coastal marine area where adjoining industrial areas; and/or
 - ii. areas containing significant infrastructure where the discharge is associated with the operation of the infrastructure
 - b maintain a high level of air quality amenity, including good visibility in other urban areas and in the coastal marine area

6.10 The inclusion of POAL's three port facilities at the Port of Auckland, Port of Onehunga, and Gabador Place within the "Air Quality Reduced Amenity Area" is also entirely consistent with the following objective and policy of C.5.1, as proposed within the evidence of Ms Gobby for this topic:

Objectives

6. The operational requirements of heavy industry, other location specific industry, significant infrastructure and mineral extraction activities are recognised and provided for and the adverse effects of their air discharges on human health, property and the environment are managed.

Policies

9. Avoid industrial air discharges in rural areas and the CMA except where:
 - a. the activity is location-specific, such as mineral extraction activities, wastewater treatment facilities, marine and port activities and activities undertaken by the New Zealand Defence Force for training and munitions testing
 - b. the activity is significant infrastructure requiring large separation distances that cannot be provided for within urban areas
 - c. the activity is a rural industry.

6.11 The HIG has proposed that a "Reduced Air Quality Amenity" Overlay be applied to a range of land within the Light Industry, Heavy Industry,

and Minor Port zones (i.e. the Port of Onehunga and Gabador Place)¹³.

- 6.12 I can confirm that the application of the "Reduced Air Quality Amenity" Overlay to the Port of Auckland, Port of Onehunga, and Gabador Place would adequately address POAL's primary relief (5137-134) in respect of the "Air Quality Reduced Amenity Area".

Further submission of POAL in support of the primary submission of The New Zealand Transport Agency Limited (1725-239)

- 6.13 POAL made a further submission in support of the primary submission of The New Zealand Transport Agency Limited ("**NZTA**") (1725-239), which sought the retention of the following permitted activity as notified:

Discharge 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 controls do not apply)

- 6.14 No changes to the above permitted activity are proposed in the evidence of Ms Jones. I will address any further amendments in respect of this matter within my rebuttal evidence, if necessary.

Further submission of POAL in support of the primary submission of Z Energy Limited and BP Oil Company Limited and Mobil Oil NZ Limited and Wiri Oil Services Limited (3676-40)

- 6.15 POAL made a further submission in support of Z Energy Limited and BP Oil Company Limited and Mobil Oil NZ Limited and Wiri Oil Services Limited ("**Oil Companies**") (3676-40), which sought to retain the exclusion for ventilation, displacement or dispensing of motor fuels from the volatile organic compound rule in the Activity Table, as notified.

- 6.16 With the exception of the addition of an exclusion for road markings (which is supported), the exclusion for ventilation, displacement or dispensing of motor fuels from the volatile organic compound rule in the Activity Table has been retained. I will address any further

¹³ The "scope" of the study that was undertaken by the HIG excluded the City Centre zone, and as such the extent to which the overlay should be applied to the Port Precinct has not been addressed.

amendments in respect of this matter within my rebuttal evidence, if necessary.

Further submission of POAL in support of the primary submission of Z Energy Limited and BP Oil Company Limited and Mobil Oil NZ Limited and Wiri Oil Services Limited (3676-42)

6.17 POAL made a further submission in support of the primary submission of the Oil Companies (3676-42), which sought the retention of the Motor Fuel Storage rules in the Activity Table, as notified.

6.18 No changes to the Motor Fuel Storage rules in the Activity Table are proposed within the evidence of Ms Jones. I will address any further amendments in respect of this matter within my rebuttal evidence, if necessary.

Further submission of POAL in support of the primary submission of Z Energy Limited and BP Oil Company Limited and Mobil Oil NZ Limited and Wiri Oil Services Limited (3676-45)

6.19 POAL made a further submission in support of the primary submission of the Oil Companies (3676-45), which sought the retention of the rules in the Activity Table and associated controls for abrasive blasting and associated conditions, as notified.

6.20 With the exception of the insertion of an additional activity status pertaining to the abrasive blasting outside of a permanent spray booth facility, using material containing less than 5 per cent dry weight free silica, no changes to the abrasive blasting rules and associated conditions are proposed in the evidence of Ms Jones. I will address any further amendments in respect of this matter within my rebuttal evidence, if necessary.

Primary submission of POAL (5137-135)

6.21 In its primary submission (5137-135), POAL sought the following amendment to control 4(a) of H.4.1 (shown in ~~strikethrough in red~~):

4. Cement storage, handling, redistribution, or packaging, where cement is stored in fully enclosed silos:
 - a. silos must be fitted with an appropriate filtration system ~~which is certified by an independent chartered~~

~~professional engineer as being designed to have a maximum emission rate of 30mg/m³ (STP and dry gas basis)~~

- b. cement must be delivered via a fully enclosed system
- c. silos must 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.

6.22 POAL's reasons were:

POAL considers that the permitted activity controls for cement silos are impracticable and unachievable, in particular:

- the "maximum emission rate" is expressed as a concentration (not a rate);
- it is not possible nor practicable to demonstrate compliance with the specified concentration as filter supplier information is expressed as a percentage removal, not an absolute emission concentration; and
- cement silo filters are purchased as an off-the-shelf item manufactured overseas, so it is not possible to obtain a part within the required certification.

Failure to comply with the permitted activity controls causes cement activities to be classified as a discretionary activity. As a consequence of the drafting of the control, all cement silos are likely to require consent as a discretionary activity, which will add significant time and cost for applicants for an activity which has effects that are well understood and easily avoided, remedied or mitigated. POAL therefore seeks that the requirement to have a filtration system that is certified by an independent chartered professional engineer as being designed to have a maximum emission rate of 30mg/m³ (STP and dry gas basis) be deleted.

6.23 While not discussed within the evidence of Ms Jones, POAL's primary submission (5137-135) appears to have been accepted, subject to the following amendments:

4. Cement storage, handling, redistribution, or packaging, ~~where cement is stored in fully enclosed silos:~~
 - a. ~~cement is stored in fully enclosed silos that~~ must be fitted with an ~~appropriate~~ filtration system with a filter surface area of at least 24m² which is certified by an independent chartered professional engineer as being designed to have a maximum emission rate of 30mg/m³ (STP and dry gas basis)
 - ~~b.~~ there should be no visible discharges of dust
 - ~~b-c.~~ cement must be delivered via a fully enclosed system
 - ~~e-d.~~ 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.

6.24 In her evidence, Ms Simpson has reviewed the amendments to control 4(a) of H.4.1 and confirms that these provisions are now workable. Accordingly, I consider that the amendments proposed by Ms Jones to control 4 of H.4.1 are generally acceptable.

Further submission of POAL in support of the primary submission of Transpacific Industries Group (New Zealand) Limited (877-37)

6.25 POAL made a further submission in support of the primary submission of Transpacific Industries Group (New Zealand) Limited ("**Transpacific**") (877-37), which sought the following amendments to the assessment criteria for restricted discretionary activities that are contained within 5.2 of H.4.1:

8. Whether discharges to air are minimised as far as practicable, where appropriate through:
 - a. ~~use of low emission fuels~~
 - b. ~~efficient use of energy~~
 - c. use of best management practices
 - d. minimisation of fugitive emissions
 - e. reduction, reuse or recycling of waste materials relating to waste processes.

6.26 While not specifically addressed in the evidence of Ms Jones, Transpacific's relief has not been accepted by Council. Consistent with the amendments that are proposed in the evidence of Ms Gobby to Policy 14 of C.5.1, the following amendments have been proposed in the evidence of Ms Jones:

8. Whether discharges to air are minimised as far as practicable, where appropriate through:
 - a. use of ~~low emission clean burning~~ fuels
 - b. efficient use of energy
 - c. use of best available management practices and practicable option emissions control
 - d. minimisation of fugitive emissions
 - e. reduction, reuse or recycling of waste materials relating to waste processes.

6.27 I agree with POAL's further submission, and do not consider it appropriate to consider criteria 8(a) and 8(b) when determining restricted discretionary air discharge consent applications. The reference to "clean burning" fuels in criterion 8(a) is unclear and does

not allow consideration of the costs or practicalities associated with obtaining and using such fuels. Criterion 8(b) is similarly unclear and seems irrelevant to the consideration of whether discharges to air are minimised. Consistent with the requirements of the RMA, the focus should be on whether or not the best practicable option is being employed to address the effects of a proposed discharge (which is required under criteria 8(c)).

Mark Nicholas Arbuthnot

19 February 2015

Annexure A

**Auckland Council Response to Changes Proposed
at 18-19 December 2014 mediation
C 5.1 Auckland wide objectives and policies – Air Quality
17 February 2015**

The Proposed Auckland Unitary Plan (notified 30 September 2013)

Changes agreed by all parties at mediation accepted as base text (ie black font, no underlining or strikethrough) Where it was agreed at mediation that policies should be deleted these are shown as black font ~~strikethrough~~ for the purpose of informing the Independent Hearings Panel.

Text in blue identifies areas of contention, where the agreement of all parties was not achieved at mediation. These provisions are to be addressed in evidence.

Text in blue with underlining or ~~strikethrough~~ is new wording proposed by Auckland Council in response to points raised at mediation, or inserted as a result of post mediation agreements reached by the relevant parties. Auckland Council will be addressing these additions in its evidence.

Amendments sought by the Heavy Industry Working Group are shown in ~~strikethrough~~ and underlined in yellow shading.

Where POAL is seeking amendments beyond those suggested by the Heavy Industry Working Group, these are shown in ~~strikethrough~~ and underline in yellow shading.

5 Natural resources

5.1 Air quality

Background

Auckland's urban areas are the main focus of the Unitary Plan's objectives and policies relating to the management of air quality. This reflects the higher numbers of people that are impacted by sources of air pollution in the urban area. Higher population densities, together with mixed residential, commercial and industrial land uses and the high numbers of vehicles means there needs to be a greater focus on both the management of individual discharges from various sources and the separation of incompatible land uses and activities. There are also industrial processes and significant infrastructure that cannot avoid discharging contaminants into the air and their operation needs to be recognised and supported. The effects of these activities can be managed through methods such as the use of suitable control technology, and on-site management techniques. New sensitive uses can avoid establishing in proximity to these activities. New industries can also locate in appropriate areas.

Motor vehicles are the largest contributor to overall air pollution in Auckland. Motor vehicle emissions are very difficult to control or contain, and degraded air quality, as a result, has adverse impacts on human health, ecosystems and amenity values. It is recognised that minimising the discharge of contaminants to air through regulation is more effectively undertaken at a national level rather than at a regional level. The Unitary Plan takes an approach that manages land uses to reduce adverse effects and support reduced vehicle use, permits discharges to air from individual vehicles, encourages best practice and educates the community on methods to minimise any discharges. Location of sensitive activities with respect to transport sources will become increasingly important with a growing population.

Domestic home heating is a large source of emissions in winter and emissions are targeted for improvement, for example by the use of new and more efficient solid fuel burning appliances.

In many parts of Auckland's CMA, the effects of air discharges are highly localised and usually temporary in nature. In rural areas low densities of development do much to provide adequate separation to manage the effects of contaminants on human health and neighbourhood amenity values, provided good on-site management practices are carried out and inappropriately located rural residential development is avoided.

However some activities such as mineral extraction activities and ports do not have a choice in terms of location. Other sources of emissions such as significant infrastructure may require large sites and separation buffer distances not readily available in urban areas. In all these cases discharges of an industrial nature may occur in close proximity to sensitive land uses such as residential areas and there may be potential localised

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impacts on air quality and amenity.

Air quality amenity varies across Auckland's airsheds and reflects the predominant land use activities. Urban air quality amenity is generally high in residential, recreational and commercial areas and there is an expectation that it will be maintained at this level. Light Industry zones provide for a range of industrial activities which may have varying expectations of air quality amenity and produce variable types and amounts of air emissions. ~~A moderate medium level of air quality amenity may be appropriate for some industries in the Light Industry zone. However, other industries such as food preparation facilities or manufacturers of electronic equipment require high amenity (ie low levels of dust and odour) (ie high amenity) to operate. Industries that discharge generate odour and dust as an unavoidable outcome of their industrial processes need to manage these emissions to minimise adverse effects on more sensitive light industrial activities in the same zone.~~

The air quality amenity in the Light Industry zone will range ~~in from moderate medium to high~~ quality to reflect the mix of industrial activities. ~~Medium to low Reduced~~ air quality amenity is not acceptable in this zone. The Light Industry zone can act as a buffer between areas of high air quality amenity and the reduced air quality amenity of the Heavy Industry zone.

In ~~the Reduced Air Quality Amenity Overlay (which includes~~ the Heavy Industry zones~~)~~ and in other specified industrial or infrastructure locations a reduced level of air quality amenity is likely to occur, although industries will be expected to avoid, remedy or mitigate adverse air quality effects beyond the boundaries of their sites.

Objectives

[rcp/rp]

1. ~~Ambient A~~ air quality is maintained in those parts of Auckland that have excellent or good air quality, and ~~ambient~~ air quality is enhanced in those parts of Auckland where it is poor, ~~while recognising that enhancing air quality in some areas of Auckland is not appropriate due to operational requirements of industry and other infrastructure activities.~~

or in the alternative, as proposed by the Heaving Industry Working Group:

1. ~~Ambient A~~ air quality is maintained in those parts of Auckland that have excellent or good air quality, and ~~ambient~~ air quality is enhanced in those parts of Auckland where it is poor ~~and it has adverse effects on human health.~~
2. Air discharges, including PM₁₀ ~~and PM₂₋₅~~ (particle pollution, or particulate matter), are reduced to protect public health ~~and amenity~~, and to meet national ~~and Auckland~~ Ambient Air Quality Standards ~~and Guidelines~~ (AAAQS) in Table 1.
3. Human health, amenity values, property and environment are protected from significant adverse effects of air contaminants.
4. Industrial and rural activities are located within appropriate zones, to recognise the benefits of these activities and provide for them, and to manage adverse effects from air discharges on human health, property and the environment.
5. Incompatible land uses and activities are adequately separated to avoid, remedy or mitigate adverse effects of air discharges, and reverse sensitivity conflicts.
6. The operational requirements of ~~heavy industry, other~~ location specific industry, significant infrastructure and mineral extraction activities are ~~recognised and provided for,~~ ~~and the adverse effects of their se air discharges on human health, property and the environment are managed.~~

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7. ~~and Reduced~~ air quality amenity levels are provided for in ~~the Reduced Air Quality Amenity Overlay, the Heavy Industry zone~~
8. ~~Outside the Reduced Air Quality Amenity Overlay, Moderate~~ ~~to high~~ air quality amenity levels are maintained in Light Industry zones.
9. Land use is managed to avoid, remedy or mitigate the adverse effects of motor vehicle emissions on people, especially in respect of children's health.

Policies

[rcp/rp]

Human health

1. Protect human health by requiring that air discharges do not cause ambient air quality to exceed ~~national Ambient Air Quality Standards and Guidelines, AAQS in Table 1 for the specified contaminants~~ wherever a person might reasonably be exposed to the contaminant over the relevant time period. ~~by:~~
 - ~~a. avoiding, remedying or mitigating the adverse effects, including cumulative adverse effects of discharges to air~~
 - ~~b. assessing whether a person would reasonably be exposed over the relevant time period in any part of the airshed (other than the site on which the consent would be exercised)~~
- ~~2. Protect human health by requiring that air discharges do not cause ambient air quality to exceed the AAQS in Table 1 for the specified contaminants, wherever a person might reasonably be exposed to the contaminant over the relevant time period specified in Table 1 for that standard.~~
2. Manage the discharge of ~~other~~ contaminants ~~not listed in Table 1~~ ~~not covered by the national Ambient Air Quality Standards and Guidelines~~ so that the adverse effects on human health, including cumulative adverse effects, are avoided, remedied or mitigated.

Domestic indoor fires

3. Manage air discharges from indoor solid fuel burning domestic fires, so that air discharges do not cause significant adverse effects to people or the environment, including nuisance to neighbours from odours, particulate matter (PM), dust, fumes, smoke, ash and visible emissions.
- ~~4. Manage indoor solid fuel burning domestic fires in rural areas or the CMA so that air discharges do not cause significant adverse effects to people or the environment, including avoiding effects from the discharge of hazardous air pollutants.~~

Air Quality Amenity

4. Manage ~~areas of high air quality amenity~~ in the CMA, and ~~in~~ urban areas by:
 - a. Avoiding, remedying or mitigating adverse effects of air discharges from all activities including offensive or objectionable odour, dust, fumes, smoke, ash, overspray and visible emissions;
 - b. ~~having requiring~~ adequate separation distances between ~~activities which have air~~

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discharges and sensitive activities sensitive to air discharges.

or in the alternative, as proposed by the Heaving Industry Working Group:

~~b. having requiring adequate separation distances between activities which have air discharges and sensitive activities sensitive to air discharges.~~

5. Manage the air quality amenity in rural areas by:

a. avoiding, remedying or mitigating adverse effects of air discharges from all activities including offensive or objectionable odour, dust, fumes, smoke, ash, overspray and visible emissions.

b. recognising the nature of activities associated with the primary production sector and the rural character of rural areas.

c. allowing for minor and localised degradation of air quality amenity only where the air discharge is from:

- i rural production activities or rural industry, or
- ii the operation of significant 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

~~d. requiring adequate separation distances between activities which have air discharges and activities sensitive to air discharges.~~

6. Manage air quality amenity in the Light Industry zone outside the Reduced Air Quality Amenity Overlay to support the use and development of that zone by:

a. accepting a moderate medium level of air quality amenity that ranges from medium-moderate to high, but avoiding a reduced lesser air quality amenity, provided any discharge to air is minimised and adverse effects are avoided, remedied or mitigated.

b. recognising the range of activities in the Light Industry zone and their different operational requirements for odour and dust to be avoided, remedied or mitigated.

c. notwithstanding clause a, maintaining high air quality amenity in areas of the Light Industry zone where existing activities require this amenity level for their operations.

~~d. accepting a medium moderate level of air quality amenity in areas of the Light Industry zone where existing activities require this amenity level for their operations~~

~~e. requiring adequate separation distances between activities which have air discharges and activities sensitive to discharges, to avoid, remedy or mitigate adverse effects on areas of higher air quality amenity in the zone, or on adjacent zones with high air quality amenity.~~

7. Manage reduced air quality amenity in the Reduced Air Quality Amenity Overlay Heavy Industry and Quarry zones in the Unitary Plan and in the Commercial 6 zone in the Hauraki Gulf Islands section of the Auckland Council District Plan, to support the use and development of that zone those areas by:

a. accepting some reduction in reduced air quality amenity in the above zones areas, provided any discharge to air is minimised and any adverse health effects are avoided, remedied or mitigated.

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- b. ~~requiring adequate separation distances between activities which have air discharges and activities sensitive to air discharges to ensure any air discharges that move beyond reduced air quality amenity areas meet the air quality amenity provisions of the adjacent area.~~
- c. avoiding activities sensitive to air discharges locating in ~~reduced air quality amenity the above~~ areas and discouraging their location in areas adjacent to reduced air quality amenity areas.
- d. recognising that visual emissions of water vapour within ~~Heavy Industry zones~~ the above areas may be appropriate.

Reverse sensitivity and separation distances

8. Maintain adequate separation distances between activities with air discharges and those sensitive to air discharges by:

- a. encouraging new heavy industry that requires an air discharge consent to locate in the Heavy Industry zone or the Reduced Air Quality Amenity Overlay, ~~s with a separation distance of 500m from zones providing for activities sensitive to air discharges; and~~
- b. ~~not allowing discouraging~~ new activities with air discharges that are likely to have adverse effects to locate in zones where activities sensitive to air discharges are permitted activities, unless it can be shown that adverse effects can be avoided, remedied or mitigated and the air quality amenity provisions of the zone are met
- c. recognising that, other than air discharges from road tunnels, mobile source discharges are controlled at source by other methods at the national level.
- d. ~~not allowing activities including heavy industry that require air discharge consents to locate in Light Industry zones, unless it can be shown that adverse effects on activities sensitive to air discharges can be avoided, remedied or mitigated and the air quality amenity provisions of the zone are met.~~
- e. discouraging activities sensitive to air discharges from locating in areas or adjacent to reduced air quality amenity areas. When rezoning within 500m of a reduced air quality amenity area, this includes considering the extent to which the new zone is likely to create reverse sensitivity effects on existing activities within the reduced air quality amenity area and the efficient and effective functioning of that area.

8A. Require new activities that have air discharges that move beyond the boundary of air quality amenity areas to meet the air quality amenity provisions of the adjacent zone, when measured at the boundary of the adjacent zone.

9 Avoid industrial air discharges in rural areas and the CMA except where:

- a. the activity is location-specific, such as mineral extraction activities, wastewater treatment facilities, marine and port activities and activities undertaken by the New Zealand Defence Force for training and munitions testing ~~or;~~
- b. the activity is significant infrastructure requiring large separation distances that cannot be provided for within urban areas ~~or;~~
- c. the activity is a rural industry.

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Air discharges from transport

- ~~10. Require applications for land use consent or designation for a high traffic generating activity to demonstrate that:~~
- ~~d. Any potential discharges of pollutants to air from vehicles have been assessed using best practice methods such as modelling and monitoring, appropriate to the scale of the discharge and any potential adverse effects~~
 - ~~e. the combined concentrations of air discharges arising from the activity and background levels will not cause adverse effects on human health, or on regional or local air quality, and will meet the AAAQS in Table 1~~
 - ~~f. methods are used to manage vehicle emissions on site including:~~
 - ~~i. appropriate site design, layout and access~~
 - ~~ii. policies to discourage idling by heavy duty vehicles~~
 - ~~iii. provisions of pedestrian friendly access and cycling facilities to provide practicable alternatives to the use of private motor vehicles for trips to and from the activity~~
 - ~~iv. easy access to public transport is available so that people have an alternative to private vehicles~~
 - ~~g. access to and the layout and design of the land use or activity facilitates walking or cycling as a practicable alternative to the use of private motor vehicles for trips to/from the activity.~~

10. Avoid or minimise adverse effects from motor vehicle emissions on activities sensitive to air discharges by separating these activities from significant motor vehicle emissions generated on roads identified in the Air Quality Transport Corridor Separation overlay.

Air discharges from outdoor burning

112. Require air discharges from outdoor burning, including odour, dust, fumes, smoke, visible emissions and hazardous air pollutants to be:
- a. be avoided in urban and industrial areas and the CMA
 - b. be minimised in rural areas.
 - c. minimise as far as practicable adverse effects on health and air quality amenity when associated with test and training exercises by emergency response services.

This policy does not apply to air discharges from actual emergency response activities.

Managing air quality from individual discharge sources

123. Avoid, remedy or mitigate the adverse effects of air discharges by:
- a. using best available practicable option practicable option management practices appropriate to the scale of the discharge and any potential adverse effects
 - b. adopting a precautionary approach, including shorter consent durations or more frequent reviews of the consent where there is uncertainty and/or a risk of significant adverse effects or irreversible harm to the environment from air discharges
 - c. using best practicable option emissions control at the source of the discharge
 - d. avoiding air discharges that will cause significant adverse effects
134. Avoid, remedy or mitigate the following significant adverse effects of air discharges beyond the boundary of the premises where the discharge is occurring, including:

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- a. noxious or dangerous effects on human health, property or the environment from hazardous air pollutants
- b. offensive or objectionable effects on amenity from odour, dust, fumes smoke, ash and visible emissions
- c. overspray effects on human health, property or the environment

~~14.5 Require individual sources of any discharge to air to demonstrate where relevant to the discharge type and reasonably practicable that:~~

~~a. clean burning low emission fuels are used~~

~~b. energy is efficiently used~~

~~c. fugitive emissions are minimised~~

~~d. risk and adverse effects on people, property and the environment from hazardous air pollutants are avoided, remedied or mitigated.~~

~~e. the amenity provisions of any zone where the discharge is having an effect are met~~

~~f. recognised best available practicable option practice management practices and best practicable option emission control standards are employed~~

~~g. there are adequate separation distances to activities sensitive to air discharges~~

~~h. significant adverse effects on flora and fauna, particularly where they are food sources or in areas identified as SEAs both on land and in the CMA are avoided, remedied or mitigated.~~

~~15.6 Require large scale combustion sources with air discharges to:~~

~~a. be assessed on a total generating capacity n input energy basis so that emissions from different types of combustion sources and their potential adverse effects can be directly compared~~

~~b. demonstrate for activities that require discretionary air discharge consent that any adverse effects on aircraft stability and/or safety are avoided, remedied or mitigated.~~

167 Require waste processes and intensive farming with air discharges to:

a. meet the amenity expectations of the zone into which the activity discharges

b. maintain adequate separation distances from activities sensitive to air discharges

c. encourage the reduction, reuse or recycling of waste materials in the process.

~~a. internalise adverse odour effects within the premises, or on other land under the control of the same owner or occupier as the activity, unless it can be demonstrated that the amenity provisions of the zone into which the activity discharges can be met~~

Resource consents for air discharges

178. Assess the effects of air discharges from a premise or site, including all activities that require discharge consents, together to generally grant a single air discharge consent per premise or site.

~~18.9 Require applications for activities requiring resource consent for air discharges to:~~

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- a. ~~demonstrate that the discharges will not cause ambient air quality to exceed the AAAQS in Table 1~~
- b. ~~show how the amenity provisions of the zone, and any adjacent zone where there are effects from the activity, are met~~
- c. ~~assess air discharges using methods such as modelling and monitoring, appropriate to the scale of the discharge and any potential adverse effects~~
- d. ~~demonstrate best available practicable option practice management practices including minimising discharges~~
- e. ~~demonstrate that the chosen method and amount of discharge does not have a practicable alternative that causes fewer less adverse effects~~
- f. ~~demonstrate that the location of the activity and any discharge is suitable to avoid, remedy or mitigate adverse effects on the environment, health and amenity especially on sensitive activities~~
- g. ~~provide details of how the offsets policy will be met, where relevant~~
- h. ~~avoid, remedy or mitigate any cumulative adverse effects~~
- i. ~~demonstrate that any risk to people and property has been adequately avoided or mitigated~~
- j. ~~demonstrate that adequate separation distances are available for the duration of the consent to ensure that adverse effects on health and amenity of activities sensitive to air discharges are avoided or mitigated~~
- k. ~~assess for the duration of the consent sought the potential for reverse sensitivity effects to occur.~~

20. When considering the duration of a resource consent the following factors shall be taken into account:

- a. ~~compliance with the best practicable option~~
- b. ~~the risk of unforeseen adverse effects arising from the activity~~
- c. ~~potential changes to the sensitivity of the receiving environment~~
- d. ~~potential for the understanding of health impacts of pollutants being emitted to change~~
- e. ~~for replacement consents the track record of the consent holder with regard to avoiding, remedying or mitigating adverse environmental effects~~
- f. ~~for replacement consents the consent holder's capital investment in the existing activity.~~

Monitoring of air quality

19.20. Carry out monitoring of air quality to ensure adverse effects on human health, property or the environment are adequately avoided, remedied or mitigated and air quality ~~meets the national Ambient Air Quality Standards. AAAQS. Reporting of compliance with the AAAQS will exclude exceedances caused by exceptional circumstances beyond the reasonable control of Auckland Council.~~ nationally and internationally accepted standards and protocols.

204. Use the FIDOL (frequency, intensity, duration, offensiveness and location) method when determining the adverse effects of odour, dust, smoke, ash, fume, overspray or visible emissions.

Air discharge offsets

21. ~~Provide for new significant discharges of PM₁₀ by giving effect to the requirements of Regulation 17 of the~~

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Resource Management (National Environmental Standard for Air Quality) Regulations 2004 for offsets of PM₁₀.

- a. In addition to the requirements of Regulation 17 PM₁₀ offsets are also required:
- i. if the airshed is polluted as defined in Regulation 17(4) of the Resource Management (National Environmental Standard for Air Quality) Regulations 2004; and
 - ii. if the discharge to be expressly allowed by the consent is new, or increased above previously consented levels for that site; and
 - ~~iii. if the discharge to be expressly allowed by the consent exceeds 4 tonnes per year of PM₁₀.~~
- b. Under this policy PM₁₀ offsets must be calculated:
- i. on an annual mass discharge basis and be offset on a one to one annual mass discharge basis; and
 - ii. as if all discharges of PM₁₀ are equal irrespective of source; and
 - iii. assuming that all total suspended particulate (TSP) is PM₁₀ unless demonstrated otherwise.
- c. For the purpose of this policy PM₁₀ offsets must be given effect to as close as practicable to where the effects of the discharge occur.

~~22. Provide for new significant discharges of PM_{2.5} by requiring offsets in polluted airsheds, but only if Policy 23 is not required:~~

- ~~a. if the airshed is not polluted as defined in Regulation 17(4) of the Resource Management (National Environmental Standard for Air Quality) Regulations 2004; and~~
- ~~b. if the airshed's 5-year rolling average exceedances of PM_{2.5} is greater than the permissible number of exceedances in column 4 of Table 1 for PM_{2.5}; and~~
- ~~c. if the discharge to be expressly allowed by the consent is new, or increased above previously consented levels for that site; and~~
- ~~d. if the discharge to be expressly allowed by the consent would be likely at any time to increase the concentration of PM_{2.5} (calculated as a 24-hour mean) by more than 1.25µg/m³ in any part of the airshed (other than the site on which the consent would be exercised) at locations where people may reasonably be exposed or if discharges from the site exceed 2 tonnes per year of PM_{2.5}.~~
- ~~e. Under this policy PM_{2.5} offsets must be calculated:~~
 - ~~i. on an annual mass discharge basis and be offset on a one to one annual mass discharge basis; and~~
 - ~~ii. as if all discharges of PM_{2.5} are equal irrespective of source.~~
- ~~f. For the purpose of this policy PM_{2.5} offsets must:~~
 - ~~i. be given effect to as close as practicable to where the effects of the discharge occur; and~~

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~~ii. take effect within 12 months after the consent is granted and be effective for the remaining duration of the consent.~~

~~23. Allow the use of offsets in achieving compliance with the AAAQS for other air contaminants where relevant.~~

~~23.. Give effect to the requirements of the Resource Management (National Environmental Standard (for Air Quality)) Regulations 2004 and to comply with the AAAQS by offsetting new discharges of PM¹⁰ or PM^{2.5} particulate matter that require consent and will discharge into an the Auckland airshed that is polluted;~~

~~Offsets are required must:~~

~~a. be required until the Auckland airshed achieves five years without any breach of the AAAQS for PM¹⁰ or PM^{2.5}~~

~~b. be for new activities or when emissions from existing consented activities increase above previously consented levels.~~

~~c. be undertaken if maximum predicted ground level concentrations exceed 2.5µg/m³ of PM₁₀ offsite at locations where people may reasonably be exposed or if mass emissions from the premises exceed 4t per year of PM₁₀~~

~~Offsets must also~~

~~d. be calculated on an annual mass emission basis and be offset on a one to one annual mass emission basis~~

~~e. be given effect to done as close as practicable to where the effects of the discharge occur~~

~~f. be in effect within one year of consent issue and be for at least as long as for the duration of the consent~~

~~g. treat all sources of PM₁₀ as equal irrespective of source~~

~~h. be treated as having the same health effects irrespective of the source of the PM¹⁰ or PM^{2.5}. There will be no consideration of the particulate composition of the source or offset~~

~~i. not consider fugitive emissions or precursors for secondary forms of particulate matter~~

~~h assume that all total suspended particulate (TSP) is PM₁₀ unless demonstrated otherwise.~~

~~24 Allow the use of offsets in achieving compliance with the AAAQS for other air contaminants where relevant.~~

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Table 1: Auckland Ambient Air Quality Standards (AAQS)

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

Asterisk * - AAQS standards taken from NES.

Amendments sought by the Heavy Industry Working Group are shown in ~~struckthrough~~ and underlined in yellow shading (consequential amendments for consistency with Heavy Industry Working Group C5.1 redline).

Where POAL is seeking amendments beyond those suggested by the Heavy Industry Working Group, these are shown in ~~struckthrough~~ and underline in yellow shading.

4.1 Air quality

1. Activity table

The following table specifies the activity status for discharges of contaminants to air. Refer to other provisions in the Unitary Plan for the activity status of the related land use activity.

Note: Strategic Transport Corridor Zones and roads, will assume the most stringent air quality amenity requirements of the adjacent zones.

* Denotes zones within the Auckland Council District Plan (Hauraki Gulf Islands (HGI) Section)

[rcp/rp]

Activity	Air quality high amenity area • all other zones (including all coastal zones and the HGI zones)	Air quality rural amenity area • Rural Production • Mixed Rural • Rural Coastal • Future Urban • Rural 1-3* • Rural 2* • Rural 3* • <u>Landform 1-7*</u>	Air quality moderate <u>medium to high</u> amenity area • Light Industry (outside <u>Reduced Air Quality Amenity Overlay</u>) • Commercial 5*	Air quality reduced amenity area • Light Industry • <u>Port Precinct</u> • <u>Port of Onehunga</u> • <u>Gabador Place</u> Or in the alternative, as proposed by the Heavy Industry Working Group: <u>Reduced Air Quality reduced Amenity Overlay area</u> • <u>Heavy Industry</u>	Air quality reduced amenity area • Special Purpose - Quarry • Commercial 6 zones*
General permitted controls					
Activities meeting the general permitted activity controls and not provided for by any other rule	P	P	P	P	P

Activity	Air quality high amenity area • all other zones (including all coastal zones and the HGI zones)	Air quality rural amenity area • Rural Production • Mixed Rural • Rural Coastal • Future Urban • Rural 1-3* • Rural 2* • Rural 3* • Landform 1-7* 5*	Air quality moderate medium to high amenity area • Light Industry (outside Reduced Air Quality Amenity Overlay) • Commercial 5*	Air quality reduced amenity area • Light Industry • Port Precinct • Port of Onehunga • Gabador Place Or in the alternative, as proposed by the Heavy Industry Working Group: Reduced Air Quality reduced Amenity Overlay area • Heavy Industry	Air quality reduced amenity area • Special Purpose - Quarry • Commercial 6 zones*
Activities not meeting the general permitted activity controls and not provided for by any other rule	D	D	D	D	D
Chemical and metallurgical processes					
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 <u>and excluding road marking</u>	D	D	D	D	D
Electroplating	RD	RD	RD	RD	RD
Fumigant for use in commercial pest control	P	P	P	P	P

Activity	Air quality high amenity area • all other zones (including all coastal zones and the HGI zones)	Air quality rural amenity area • Rural Production • Mixed Rural • Rural Coastal • Future Urban • Rural 1-3* • Rural 2* • Rural 3* • Landform 1-7*	Air quality moderate medium to high amenity area • Light Industry (outside Reduced Air Quality Amenity Overlay) • Commercial 5*	Air quality reduced amenity area • Light Industry • Port Precinct • Port of Onehunga • Gabor Place Or in the alternative, as proposed by the Heavy Industry Working Group: Reduced Air Quality reduced Amenity Overlay area • Heavy Industry	Air quality reduced amenity area • Special Purpose - Quarry • Commercial 6 zones*
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
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
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
Removal of coatings from wire or cable by heating with emissions control equipment	NC	RD	RD	RD	RD

Activity	Air quality high amenity area • all other zones (including all coastal zones and the HGI zones)	Air quality rural amenity area • Rural Production • Mixed Rural • Rural Coastal • Future Urban • Rural 1-3* • Rural 2* • Rural 3* • Landform 1-7*	Air quality moderate medium to high amenity area • Light Industry (outside Reduced Air Quality Amenity Overlay) • Commercial 5*	Air quality reduced amenity area • Light Industry • Port Precinct • Port of Onehunga • Gabor Place Or in the alternative, as proposed by the Heavy Industry Working Group: Reduced Air Quality reduced Amenity Overlay area • Heavy Industry	Air quality reduced amenity area • Special Purpose - Quarry • Commercial 6 zones*
Removal of coatings from wire or cable by heating not provided for by any other rule	Pr	Pr	Pr	Pr	Pr
Spray application of surface coatings containing diisocyanates or hazardous organic plasticisers <u>at an individual site</u> not in a spray booth or at a domestic premises at an application rate no more than 2L/day	P	P	P	P	P
<u>Spray application of surface coatings containing diisocyanates or organic plasticisers for maintenance of Significant Infrastructure</u>	<u>P</u>	<u>P</u>	<u>P</u>	<u>P</u>	<u>P</u>
Spray application of surface coatings containing diisocyanates or organic plasticisers in a spray booth	P	P	P	P	P

Activity	Air quality high amenity area • all other zones (including all coastal zones and the HGI zones)	Air quality rural amenity area • Rural Production • Mixed Rural • Rural Coastal • Future Urban • Rural 1-3* • Rural 2* • Rural 3* • Landform 1-7*	Air quality moderate medium to high amenity area • Light Industry (outside Reduced Air Quality Amenity Overlay) • Commercial 5*	Air quality reduced amenity area • Light Industry • Port Precinct • Port of Onehunga • Gabor Place Or in the alternative, as proposed by the Heavy Industry Working Group: Reduced Air Quality reduced Amenity Overlay area • Heavy Industry	Air quality reduced amenity area • Special Purpose - Quarry • Commercial 6 zones*
Spray application of surface coatings containing diisocyanates or organic plasticisers in a spray booth not meeting the permitted activity controls	RD	RD	RD	RD	RD
Thermal metal spraying of any metal or metal alloy where discharges to air are through particulate control equipment	P	P	P	P	P
Thermal metal spraying of any metal or metal alloy that does not comply with permitted activity controls	D	D	D	D	D
Chemical processes or activities associated with small laboratory scale and home hobby operations	P	P	P	P	P

Activity	Air quality high amenity area • all other zones (including all coastal zones and the HGI zones)	Air quality rural amenity area • Rural Production • Mixed Rural • Rural Coastal • Future Urban • Rural 1-3* • Rural 2* • Rural 3* • Landform 1-7* 5*	Air quality moderate medium to high amenity area • Light Industry (outside Reduced Air Quality Amenity Overlay) • Commercial	Air quality reduced amenity area • Light Industry • Port Precinct • Port of Onehunga • Gabor Place Or in the alternative, as proposed by the Heavy Industry Working Group: Reduced Air Quality reduced Amenity Overlay area • Heavy Industry	Air quality reduced amenity area • Special Purpose - Quarry • Commercial 6 zones*
Bodying of oils or manufacture of monomers, synthetic resins, varnishes, plastics or adhesives	D	D	D	D	D
Storage, manufacture or use of acrylates or styrene (threshold to be determined for styrene)	D	D	D	D	D
Use of more than 9 kilograms per hour of styrene	D	RD	RD	P	P
Production of soap, grease, or surface active agents	D	D	D	D	D
Synthesis or extraction of organic chemicals, including synthesis, extraction, blending or formulation of agrichemicals, or plant hormones	D	D	D	D	D

Activity	Air quality high amenity area • all other zones (including all coastal zones and the HGI zones)	Air quality rural amenity area • Rural Production • Mixed Rural • Rural Coastal • Future Urban • Rural 1-3* • Rural 2* • Rural 3* • Landform 1-7* 5*	Air quality moderate medium to high amenity area • Light Industry (outside Reduced Air Quality Amenity Overlay) • Commercial	Air quality reduced amenity area • Light Industry • Port Precinct • Port of Onehunga • Gabor Place Or in the alternative, as proposed by the Heavy Industry Working Group: Reduced Air Quality reduced Amenity Overlay area • Heavy Industry	Air quality reduced amenity area • Special Purpose - Quarry • Commercial 6 zones*
Production of inorganic chemicals, including concentration of acids or anhydrides, ammonia or alkalis	D	D	D	D	D
Production or blending of fertilisers, including the granulation of single or mixed fertilizers	D	D	D	D	D
Solvent manufacture or recovery	D	D	D	D	D
Distillation, refining or other processing of petroleum or petrol products	D	D	D	D	D
Total or partial disposal of solid or liquid substances by chemical decomposition	D	D	D	D	D
Dry distillation of coal or lignite	D	D	D	D	D

Activity	Air quality high amenity area • all other zones (including all coastal zones and the HGI zones)	Air quality rural amenity area • Rural Production • Mixed Rural • Rural Coastal • Future Urban • Rural 1-3* • Rural 2* • Rural 3* • Landform 1-7*	Air quality moderate medium to high amenity area • Light Industry (outside Reduced Air Quality Amenity Overlay) • Commercial 5*	Air quality reduced amenity area • Light Industry • Port Precinct • Port of Onehunga • Gabador Place Or in the alternative, as proposed by the Heavy Industry Working Group: Reduced Air Quality reduced Amenity Overlay area • Heavy Industry	Air quality reduced amenity area • Special Purpose - Quarry • Commercial 6 zones*
Production of metals or non-metals by a wet process or by means of electrical or mechanical energy	D	D	D	D	D
Production, processing or treatment of organic or inorganic compounds	D	D	D	D	D
Separation, dewatering through the application of heat or distillation of hydrocarbons including used (waste) oil	D	D	D	D	D
Use of bitumen in the manufacture of products other than roading mix	D	D	D	D	D
Carbonising or destructive distillation of hydrocarbons where the solid, liquid or gaseous products are recovered	D	D	D	D	D

Activity	Air quality high amenity area • all other zones (including all coastal zones and the HGI zones)	Air quality rural amenity area • Rural Production • Mixed Rural • Rural Coastal • Future Urban • Rural 1-3* • Rural 2* • Rural 3* • Landform 1-7* 5*	Air quality moderate medium to high amenity area • Light Industry (outside Reduced Air Quality Amenity Overlay) • Commercial 5*	Air quality reduced amenity area • Light Industry • Port Precinct • Port of Onehunga • Gabor Place Or in the alternative, as proposed by the Heavy Industry Working Group: Reduced Air Quality reduced Amenity Overlay area • Heavy Industry	Air quality reduced amenity area • Special Purpose - Quarry • Commercial 6 zones*
Gasification of any hydrocarbon by partial combustion with air or oxygen or reaction with steam	D	D	D	D	D
Manufacturing of semiconductors, explosives, paints, inks or powder coatings	D	D	D	D	D
Industrial gas manufacturing	D	D	D	D	D
Cleaning of metal by pyrolysis	D	D	D	D	D
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
Manufacture of more than 5 tonnes per day of fibreglass products	D	D	D	D	D

Activity	Air quality high amenity area • all other zones (including all coastal zones and the HGI zones)	Air quality rural amenity area • Rural Production • Mixed Rural • Rural Coastal • Future Urban • Rural 1-3* • Rural 2* • Rural 3* • Landform 1-7* 5*	Air quality moderate medium to high amenity area • Light Industry (outside Reduced Air Quality Amenity Overlay) • Commercial 5*	Air quality reduced amenity area • Light Industry • Port Precinct • Port of Onehunga • Gabor Place Or in the alternative, as proposed by the Heavy Industry Working Group: Reduced Air Quality reduced Amenity Overlay area • Heavy Industry	Air quality reduced amenity area • Special Purpose - Quarry • Commercial 6 zones*
Use of more than 200 kilogrammes per hour of resins	D	D	D	D	D
Mechanical shredding of scrap outdoors (including the mechanical removal of plastic or rubber covering from cable), or indoors that does not comply with permitted activity controls	D	D	D	D	D
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 controls	D	D	D	D	D
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

Activity	Air quality high amenity area • all other zones (including all coastal zones and the HGI zones)	Air quality rural amenity area • Rural Production • Mixed Rural • Rural Coastal • Future Urban • Rural 1-3* • Rural 2* • Rural 3* • Landform 1-7* 5*	Air quality moderate medium to high amenity area • Light Industry (outside Reduced Air Quality Amenity Overlay) • Commercial	Air quality reduced amenity area • Light Industry • Port Precinct • Port of Onehunga • Gabor Place Or in the alternative, as proposed by the Heavy Industry Working Group: Reduced Air Quality reduced Amenity Overlay area • Heavy Industry	Air quality reduced amenity area • Special Purpose - Quarry • Commercial 6 zones*
The manufacture of steel, the refining of any metal, or the modification of any alloy in the molten state	D	D	D	D	D
Melting of any metal or metal alloy with a melting capacity of more than 1t/hour	D	D	D	D	D
Galvanizing	D	D	D	D	D
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

Activity	Air quality high amenity area • all other zones (including all coastal zones and the HGI zones)	Air quality rural amenity area • Rural Production • Mixed Rural • Rural Coastal • Future Urban • Rural 1-3* • Rural 2* • Rural 3* • Landform 1-7* 5*	Air quality moderate medium to high amenity area • Light Industry (outside Reduced Air Quality Amenity Overlay) • Commercial	Air quality reduced amenity area • Light Industry • Port Precinct • Port of Onehunga • Gabador Place Or in the alternative, as proposed by the Heavy Industry Working Group: Reduced Air Quality reduced Amenity Overlay area • Heavy Industry	Air quality reduced amenity area • Special Purpose - Quarry • Commercial 6 zones*
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
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
Chemical and metallurgical processes not otherwise listed	D	D	D	D	D
Combustion activities					

Activity	Air quality high amenity area • all other zones (including all coastal zones and the HGI zones)	Air quality rural amenity area • Rural Production • Mixed Rural • Rural Coastal • Future Urban • Rural 1-3* • Rural 2* • Rural 3* • Landform 1-7*	Air quality moderate medium to high amenity area • Light Industry (outside Reduced Air Quality Amenity Overlay) • Commercial 5*	Air quality reduced amenity area • Light Industry • Port Precinct • Port of Onehunga • Gabor Place Or in the alternative, as proposed by the Heavy Industry Working Group: Reduced Air Quality reduced Amenity Overlay area • Heavy Industry	Air quality reduced amenity area • Special Purpose - Quarry • Commercial 6 zones*
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
Very small industrial, trade and institutional combustion sources fuelled by for the purpose of raising heat or energy from the combustion of any one of the following: a. natural gas or liquefied petroleum gas up to a total gross heat release generating capacity of 2MW; or b. wood, (including untreated wood products such as wood chips and	P	P	P	P	P

Activity	Air quality high amenity area • all other zones (including all coastal zones and the HGI zones)	Air quality rural amenity area • Rural Production • Mixed Rural • Rural Coastal • Future Urban • Rural 1-3* • Rural 2* • Rural 3* • Landform 1-7*	Air quality moderate medium to high amenity area • Light Industry (outside Reduced Air Quality Amenity Overlay) • Commercial 5*	Air quality reduced amenity area • Light Industry • Port Precinct • Port of Onehunga • Gaboror Place Or in the alternative, as proposed by the Heavy Industry Working Group: Reduced Air Quality reduced Amenity Overlay area • Heavy Industry	Air quality reduced amenity area • Special Purpose - Quarry • Commercial 6 zones*
pellets) or diesel up to a total gross heat release generating capacity of 500kW					
Small combustion sources established before 1 May 2014 fuelled by for the purpose of raising heat or energy from the combustion of any of the following a. natural gas or liquefied petroleum gas, with a total gross heat release generating capacity of between more than 2 and not exceeding 22MW; or b. diesel, with a total gross heat release generating capacity of between more than 500kW and not exceeding 10MW; or c. light or heavy fuel oil,	P	P	P	P	P

Activity	Air quality high amenity area • all other zones (including all coastal zones and the HGI zones)	Air quality rural amenity area • Rural Production • Mixed Rural • Rural Coastal • Future Urban • Rural 1-3* • Rural 2* • Rural 3* • Landform 1-7* 5*	Air quality moderate medium to high amenity area • Light Industry (outside Reduced Air Quality Amenity Overlay) • Commercial	Air quality reduced amenity area • Light Industry • Port Precinct • Port of Onehunga • Gaboror Place Or in the alternative, as proposed by the Heavy Industry Working Group: Reduced Air Quality reduced Amenity Overlay area • Heavy Industry	Air quality reduced amenity area • Special Purpose - Quarry • Commercial 6 zones*
excluding waste oil, not exceeding a total gross heat release generating capacity of 10W; or d. wood, including untreated wood products such as wood chips and pellets, with a total gross heat release generating capacity of between more than 500kW and not exceeding 5MW; or e. coal with a total gross heat release generating capacity not exceeding 5MW.					
Small combustion sources established from 1 May 2014 fuelled by for the purpose of raising heat or energy from the	P	P	P	P	P

Activity	Air quality high amenity area • all other zones (including all coastal zones and the HGI zones)	Air quality rural amenity area • Rural Production • Mixed Rural • Rural Coastal • Future Urban • Rural 1-3* • Rural 2* • Rural 3* • Landform 1-7* 5*	Air quality moderate medium to high amenity area • Light Industry (outside Reduced Air Quality Amenity Overlay) • Commercial 5*	Air quality reduced amenity area • Light Industry • Port Precinct • Port of Onehunga • Gabor Place Or in the alternative, as proposed by the Heavy Industry Working Group: Reduced Air Quality reduced Amenity Overlay area • Heavy Industry	Air quality reduced amenity area • Special Purpose - Quarry • Commercial 6 zones*
<p>combustion in a boiler of any of the following:</p> <p>a. natural gas or liquefied petroleum gas, <u>in a an external combustion engine/boiler</u> with a total <u>gross heat release generating capacity</u> of <u>between more than 2</u> and <u>not exceeding 22MW</u></p> <p>b. diesel, <u>in a an external combustion engine/boiler</u> with a total <u>gross heat release generating capacity</u> of <u>between more than 500kW</u> and <u>not exceeding 10MW</u></p>					
<p>Medium combustion sources established from 1 May 2014 fuelled by for the purpose of raising heat or energy from the combustion</p>	C	C	C	C	C

Activity	Air quality high amenity area • all other zones (including all coastal zones and the HGI zones)	Air quality rural amenity area • Rural Production • Mixed Rural • Rural Coastal • Future Urban • Rural 1-3* • Rural 2* • Rural 3* • Landform 1-7*	Air quality moderate medium to high amenity area • Light Industry (outside Reduced Air Quality Amenity Overlay) • Commercial 5*	Air quality reduced amenity area • Light Industry • Port Precinct • Port of Onehunga • Gabador Place Or in the alternative, as proposed by the Heavy Industry Working Group: Reduced Air Quality reduced Amenity Overlay area • Heavy Industry	Air quality reduced amenity area • Special Purpose - Quarry • Commercial 6 zones*
<p>of any of the following:</p> <p>a. wood, including untreated wood products such as wood chips and pellets, in <u>a an external combustion engine/boiler</u> with a total <u>gross heat release generating capacity</u> of <u>between more than 500kW</u> and <u>not exceeding 2MW</u>; or</p> <p>b. light fuel oil (excluding waste oil) in <u>a an external combustion engine/boiler</u> not exceeding a total <u>gross heat release generating capacity</u> of 10MW; or</p> <p>c. natural gas or liquefied petroleum gas in an internal combustion engine/generator, with a total <u>gross heat release generating capacity</u> of</p>					

Activity	Air quality high amenity area • all other zones (including all coastal zones and the HGI zones)	Air quality rural amenity area • Rural Production • Mixed Rural • Rural Coastal • Future Urban • Rural 1-3* • Rural 2* • Rural 3* • Landform 1-7*	Air quality moderate medium to high amenity area • Light Industry (outside Reduced Air Quality Amenity Overlay) • Commercial 5*	Air quality reduced amenity area • Light Industry • Port Precinct • Port of Onehunga • Gaboror Place Or in the alternative, as proposed by the Heavy Industry Working Group: Reduced Air Quality reduced Amenity Overlay area • Heavy Industry	Air quality reduced amenity area • Special Purpose - Quarry • Commercial 6 zones*
between more than 2 and not exceeding 10 MW; or d. diesel in an internal combustion engine/generator, with a total <u>gross heat release generating capacity</u> of between more than 500kW and not exceeding 10 MW					
Medium to large combustion sources <u>fuelled by for the purpose of raising heat or energy from the combustion of</u> any of the following: a. natural gas or liquefied petroleum gas in <u>a an external combustion engine/boiler</u> with a total <u>gross heat release generating capacity</u> of between more than 22 and	RD	RD	RD	RD	RD

Activity	Air quality high amenity area • all other zones (including all coastal zones and the HGI zones)	Air quality rural amenity area • Rural Production • Mixed Rural • Rural Coastal • Future Urban • Rural 1-3* • Rural 2* • Rural 3* • Landform 1-7* 5*	Air quality moderate medium to high amenity area • Light Industry (outside Reduced Air Quality Amenity Overlay) • Commercial	Air quality reduced amenity area • Light Industry • Port Precinct • Port of Onehunga • Gabador Place Or in the alternative, as proposed by the Heavy Industry Working Group: Reduced Air Quality reduced Amenity Overlay area • Heavy Industry	Air quality reduced amenity area • Special Purpose - Quarry • Commercial 6 zones*
<p><u>not exceeding</u> 33MW; or</p> <p>b. diesel or light fuel oil in <u>a an external combustion engine/boiler</u> with a total <u>gross heat release generating capacity</u> of <u>between more than</u> 10 and <u>not exceeding</u> 20MW; or</p> <p>c. wood, including untreated wood products such as wood chips and pellets, in <u>a an external combustion engine/boiler</u> with a total <u>gross heat release generating capacity</u> of <u>between more than</u> 2 and <u>not exceeding</u> 10MW; or</p> <p>d. natural gas, liquefied petroleum gas or diesel in an internal combustion engine/generator, with a total <u>gross heat release</u></p>					

Activity	Air quality high amenity area • all other zones (including all coastal zones and the HGI zones)	Air quality rural amenity area • Rural Production • Mixed Rural • Rural Coastal • Future Urban • Rural 1-3* • Rural 2* • Rural 3* • Landform 1-7*	Air quality moderate medium to high amenity area • Light Industry (outside Reduced Air Quality Amenity Overlay) • Commercial 5*	Air quality reduced amenity area • Light Industry • Port Precinct • Port of Onehunga • Gabor Place Or in the alternative, as proposed by the Heavy Industry Working Group: Reduced Air Quality reduced Amenity Overlay area • Heavy Industry	Air quality reduced amenity area • Special Purpose - Quarry • Commercial 6 zones*
generating capacity of between more than 10 and not exceeding 20MW					
Combustion activities not meeting the permitted, controlled or restricted discretionary activity controls	D	D	D	D	D
Cremation and incineration processes					
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
Cremation of human or animal remains not meeting restricted discretionary activity controls	D	D	D	D	D

Activity	Air quality high amenity area • all other zones (including all coastal zones and the HGI zones)	Air quality rural amenity area • Rural Production • Mixed Rural • Rural Coastal • Future Urban • Rural 1-3* • Rural 2* • Rural 3* • Landform 1-7* 5*	Air quality moderate medium to high amenity area • Light Industry (outside Reduced Air Quality Amenity Overlay) • Commercial 5*	Air quality reduced amenity area • Light Industry • Port Precinct • Port of Onehunga • Gabador Place Or in the alternative, as proposed by the Heavy Industry Working Group: Reduced Air Quality reduced Amenity Overlay area • Heavy Industry	Air quality reduced amenity area • Special Purpose - Quarry • Commercial 6 zones*
Flaring of gas, excluding landfill gas, including biogas and petrochemical products	D	D	D	D	D
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

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Incineration of hazardous waste, excluding outdoor burning, backyard incinerators and single chamber incinerators covered by outdoor burning rules and excluding high temperature incineration covered by National Environmental Standards for Air Quality	Pr	Pr	Pr	Pr	Pr
Drying and kiln processes					
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

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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
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

Activity	Air quality high amenity area • all other zones (including all coastal zones and the HGI zones)	Air quality rural amenity area • Rural Production • Mixed Rural • Rural Coastal • Future Urban • Rural 1-3* • Rural 2* • Rural 3* • Landform 1-7* 5*	Air quality moderate medium to high amenity area • Light Industry (outside Reduced Air Quality Amenity Overlay) • Commercial 5*	Air quality reduced amenity area • Light Industry • Port Precinct • Port of Onehunga • Gabador Place Or in the alternative, as proposed by the Heavy Industry Working Group: Reduced Air Quality reduced Amenity Overlay area • Heavy Industry	Air quality reduced amenity area • Special Purpose - Quarry • Commercial 6 zones*
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
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

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Heat set printing at any rate where discharges to air pass through an afterburner	RD	RD	RD	RD	RD
Heat set printing at any rate where discharges to air pass do not pass through an afterburner	D	D	D	D	D
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

Activity	Air quality high amenity area • all other zones (including all coastal zones and the HGI zones)	Air quality rural amenity area • Rural Production • Mixed Rural • Rural Coastal • Future Urban • Rural 1-3* • Rural 2* • Rural 3* • Landform 1-7* 5*	Air quality moderate medium to high amenity area • Light Industry (outside Reduced Air Quality Amenity Overlay) • Commercial 5*	Air quality reduced amenity area • Light Industry • Port Precinct • Port of Onehunga • Gabador Place Or in the alternative, as proposed by the Heavy Industry Working Group: Reduced Air Quality reduced Amenity Overlay area • Heavy Industry	Air quality reduced amenity area • Special Purpose - Quarry • Commercial 6 zones*
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
Wood or paper processing using the Kraft process	Pr	Pr	Pr	Pr	Pr
Dust generating processes					

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Asbestos - extraction, processing, storage or the manufacture of products containing asbestos except where the activity is: - associated with site remediation; or - removal of asbestos from existing structures; or - the reconditioning or placing of asbestos containing friction linings to brake or clutch assemblies; and - 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

Activity	Air quality high amenity area • all other zones (including all coastal zones and the HGI zones)	Air quality rural amenity area • Rural Production • Mixed Rural • Rural Coastal • Future Urban • Rural 1-3* • Rural 2* • Rural 3* • Landform 1-7* 5*	Air quality moderate medium to high amenity area • Light Industry (outside Reduced Air Quality Amenity Overlay) • Commercial 5*	Air quality reduced amenity area • Light Industry • Port Precinct • Port of Onehunga • Gabor Place Or in the alternative, as proposed by the Heavy Industry Working Group: Reduced Air Quality reduced Amenity Overlay area • Heavy Industry	Air quality reduced amenity area • Special Purpose - Quarry • Commercial 6 zones*
Blasting (dry abrasive) within a permanent facility (spray booth) using abrasive material containing less than 5 percent dry weight free silica	P	P	P	P	P
Blasting (vacuum) using abrasive material containing less than 5 percent dry weight free silica	P	P	P	P	P
Blasting (sweep) using abrasive material containing less than 5 percent dry weight free silica	P	P	P	P	P
<u>Blasting undertaken outside a permanent facility (spray booth) using abrasive material containing less than 5 percent silica</u>	<u>RD</u>	<u>P</u>	<u>P</u>	<u>P</u>	<u>P</u>

Activity	Air quality high amenity area • all other zones (including all coastal zones and the HGI zones)	Air quality rural amenity area • Rural Production • Mixed Rural • Rural Coastal • Future Urban • Rural 1-3* • Rural 2* • Rural 3* • Landform 1-7*	Air quality moderate medium to high amenity area • Light Industry (outside Reduced Air Quality Amenity Overlay) • Commercial 5*	Air quality reduced amenity area • Light Industry • Port Precinct • Port of Onehunga • Gabor Place Or in the alternative, as proposed by the Heavy Industry Working Group: Reduced Air Quality reduced Amenity Overlay area • Heavy Industry	Air quality reduced amenity area • Special Purpose - Quarry • Commercial 6 zones*
Blasting (dry abrasive, vacuum or sweep) using abrasive material containing less than 5 percent silica but not meeting the permitted activity controls	RD	RD	RD	RD	RD
Blasting (including dry abrasive, vacuum, and sweep) using abrasive material containing greater than 5 percent silica	NC	NC	NC	NC	NC
Cement storage, handling, redistribution, or packaging, where of cement is stored in fully enclosed silos	P D	P	P	P	P
Cement storage, handling, redistribution, or packaging that does not comply with the permitted activity controls	D	D	D	D RD	D RD

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Coal storage outdoors where total amount on site is less not more than two 2 tonnes	P	P	P	P	P
Coal or coal products storage outdoors greater than two 2 tonnes but not more than 500 tonnes; or - less not more than two 2 tonnes but and not meeting general permitted activity controls	D	RD	RD	RD	RD
Coal or coal products storage outdoors of more than 500 tonnes	D	D	D	D	D
Demolition of buildings not meeting the general permitted activity controls	RD	RD	RD	RD	RD

Activity	Air quality high amenity area • all other zones (including all coastal zones and the HGI zones)	Air quality rural amenity area • Rural Production • Mixed Rural • Rural Coastal • Future Urban • Rural 1-3* • Rural 2* • Rural 3* • Landform 1-7*	Air quality moderate medium to high amenity area • Light Industry (outside Reduced Air Quality Amenity Overlay) • Commercial 5*	Air quality reduced amenity area • Light Industry • Port Precinct • Port of Onehunga • Gabor Place Or in the alternative, as proposed by the Heavy Industry Working Group: Reduced Air Quality reduced Amenity Overlay area • Heavy Industry	Air quality reduced amenity area • Special Purpose - Quarry • Commercial 6 zones*
Earthworks and the construction, maintenance and repair of public roads and railways not meeting the general permitted activity controls	RD	RD	RD	RD	RD
Manufacture of asphalt paving mix where discharges to air are through a bag filter system	D	D	RD	RD	RD
Manufacture of asphalt paving mix that does not meet the restricted discretionary controls where discharges are not through a bag filter system	NA NC	NA NC	D	D	D
Manufacture of concrete at a rate of less than up to 110 tonnes/day	P	P	P	P	P

Activity	Air quality high amenity area • all other zones (including all coastal zones and the HGI zones)	Air quality rural amenity area • Rural Production • Mixed Rural • Rural Coastal • Future Urban • Rural 1-3* • Rural 2* • Rural 3* • Landform 1-7* 5*	Air quality moderate medium to high amenity area • Light Industry (outside Reduced Air Quality Amenity Overlay) • Commercial 5*	Air quality reduced amenity area • Light Industry • Port Precinct • Port of Onehunga • Gabador Place Or in the alternative, as proposed by the Heavy Industry Working Group: Reduced Air Quality reduced Amenity Overlay area • Heavy Industry	Air quality reduced amenity area • Special Purpose - Quarry • Commercial 6 zones*
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
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
Other air discharges from any process that includes: - sintering, calcining or roasting of metal ores in preparation for smelting - burning of calcium or calcium magnesium carbonates to produce calcium or magnesium oxides or hydroxides (including lime manufacturing)	D	D	D	D	D

Activity	Air quality high amenity area • all other zones (including all coastal zones and the HGI zones)	Air quality rural amenity area • Rural Production • Mixed Rural • Rural Coastal • Future Urban • Rural 1-3* • Rural 2* • Rural 3* • Landform 1-7* 5*	Air quality moderate medium to high amenity area • Light Industry (outside Reduced Air Quality Amenity Overlay) • Commercial 5*	Air quality reduced amenity area • Light Industry • Port Precinct • Port of Onehunga • Gabador Place Or in the alternative, as proposed by the Heavy Industry Working Group: Reduced Air Quality reduced Amenity Overlay area • Heavy Industry	Air quality reduced amenity area • Special Purpose - Quarry • Commercial 6 zones*
<ul style="list-style-type: none"> - expansion or exfoliation of minerals - dehydration of gypsum - the manufacture and/or melting of glass or glass products, including vitrification, with a production capacity of greater than 1t/day -manufacture of glass or mineral wool -manufacture of cement or cement products from raw materials 					
<u>Quarrying Mineral extraction activities</u> at a rate of between 5 and 200 tonnes/hour	NC	RD	RD	RD	<u>RD-C</u>

Activity	Air quality high amenity area • all other zones (including all coastal zones and the HGI zones)	Air quality rural amenity area • Rural Production • Mixed Rural • Rural Coastal • Future Urban • Rural 1-3* • Rural 2* • Rural 3* • Landform 1-7*	Air quality moderate medium to high amenity area • Light Industry (outside Reduced Air Quality Amenity Overlay) • Commercial 5*	Air quality reduced amenity area • Light Industry • Port Precinct • Port of Onehunga • Gabor Place Or in the alternative, as proposed by the Heavy Industry Working Group: Reduced Air Quality reduced Amenity Overlay area • Heavy Industry	Air quality reduced amenity area • Special Purpose - Quarry • Commercial 6 zones*
<u>Quarrying Mineral extraction activities</u> at a rate: - exceeding 200 tonnes/ hour from any one quarrying process; - between 5 and 200 tonnes/ hour and occurring within 200m of any dwelling	NC	D	D	D	D C
<u>Mineral extraction activities</u> at a rate: - exceeding 5 tonnes/ hour from any one quarrying process not complying with controlled or restricted discretionary activity controls	<u>NC</u>	<u>D</u>	<u>D</u>	<u>D</u>	<u>D</u>

Activity	Air quality high amenity area • all other zones (including all coastal zones and the HGI zones)	Air quality rural amenity area • Rural Production • Mixed Rural • Rural Coastal • Future Urban • Rural 1-3* • Rural 2* • Rural 3* • Landform 1-7*	Air quality moderate medium to high amenity area • Light Industry (outside Reduced Air Quality Amenity Overlay) • Commercial 5*	Air quality reduced amenity area • Light Industry • Port Precinct • Port of Onehunga • Gabador Place Or in the alternative, as proposed by the Heavy Industry Working Group: Reduced Air Quality reduced Amenity Overlay area • Heavy Industry	Air quality reduced amenity area • Special Purpose - Quarry • Commercial 6 zones*
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
Crushing of concrete, masonry products, minerals, ores and/or aggregates (not associated with quarrying activities) using a mobile crusher at a rate: - greater than 60 tonnes/hour or - less than up to 60 tonnes/hour and not meeting permitted activity controls	D	RD	RD	RD	RD
Unsealed public roads	P	P	P	P	P

Emergency Services

Activity	Air quality high amenity area • all other zones (including all coastal zones and the HGI zones)	Air quality rural amenity area • Rural Production • Mixed Rural • Rural Coastal • Future Urban • Rural 1-3* • Rural 2* • Rural 3* • Landform 1-7* 5*	Air quality moderate medium to high amenity area • Light Industry (outside Reduced Air Quality Amenity Overlay) • Commercial 5*	Air quality reduced amenity area • Light Industry • Port Precinct • Port of Onehunga • Gabor Place Or in the alternative, as proposed by the Heavy Industry Working Group: Reduced Air Quality reduced Amenity Overlay area • Heavy Industry	Air quality reduced amenity area • Special Purpose - Quarry • Commercial 6 zones*
<u>Air discharges, including outdoor burning of any material, for the purpose of fire fighting and other emergency response activities, carried out by the New Zealand Fire Service, Auckland International Airport Limited and the New Zealand Defence Force</u>	<u>P</u>	<u>P</u>	<u>P</u>	<u>P</u>	<u>P</u>
<u>Air discharges, including outdoor burning of any material, for the purpose of fire emergency service training or investigation carried out by the New Zealand Fire Service, Auckland International Airport Limited and the New Zealand Defence Force</u>	RD eE Exceptions: <u>Permitted in Countryside living and Rural Conservation zones in a Rural Fire District</u> Permitted in <u>Large Lot and Countryside</u>	<u>P</u>	<u>P</u>	<u>P</u>	<u>P</u>

Activity	Air quality high amenity area <ul style="list-style-type: none"> • all other zones (including all coastal zones and the HGI zones) 	Air quality rural amenity area <ul style="list-style-type: none"> • Rural Production • Mixed Rural • Rural Coastal • Future Urban • Rural 1-3* • Rural 2* • Rural 3* • Landform 1-7* 5* 	Air quality moderate medium to high amenity area <ul style="list-style-type: none"> • Light Industry (outside Reduced Air Quality Amenity Overlay) • Commercial 	Air quality reduced amenity area <ul style="list-style-type: none"> • Light Industry • Port Precinct • Port of Onehunga • Gabador Place <p>Or in the alternative, as proposed by the Heavy Industry Working Group:</p> <ul style="list-style-type: none"> • Reduced Air Quality reduced Amenity Overlay area • Heavy Industry 	Air quality reduced amenity area <ul style="list-style-type: none"> • Special Purpose - Quarry • Commercial 6 zones*
	<p>Living zones <u>in the Urban Fire District</u> <u>providing the on</u> properties <u>is</u> greater than 1ha <u>and if</u> a council fire permit is obtained</p>				
<u>Air discharges, including from</u> Outdoor burning of any material, for the purpose of fire emergency service training <u>or and</u> investigation not meeting the permitted activity controls	RD	RD	RD	RD	RD
Food, animal or plant matter processes					

Activity	Air quality high amenity area • all other zones (including all coastal zones and the HGI zones)	Air quality rural amenity area • Rural Production • Mixed Rural • Rural Coastal • Future Urban • Rural 1-3* • Rural 2* • Rural 3* • Landform 1-7* 5*	Air quality moderate medium to high amenity area • Light Industry (outside Reduced Air Quality Amenity Overlay) • Commercial	Air quality reduced amenity area • Light Industry • Port Precinct • Port of Onehunga • Gabor Place Or in the alternative, as proposed by the Heavy Industry Working Group: Reduced Air Quality reduced Amenity Overlay area • Heavy Industry	Air quality reduced amenity area • Special Purpose - Quarry • Commercial 6 zones*
Alcoholic beverage production - From fermentation of plant matter to produce less than up to 25 million l/ year	P	P	P	P	P
Alcoholic beverage production - from fermentation of plant matter to produce more than 25 million l/year; or less than up to 25 million l/ year but not meeting the general permitted activity controls	RD	RD	RD	RD	RD
Carpet manufacturing	D	D	D	D	D
Coffee roasting at a loading rate of green coffee beans of less than up to 50kg/hour and not exceeding a total weekly production of 100kg	P	P	P	P	P

Activity	Air quality high amenity area • all other zones (including all coastal zones and the HGI zones)	Air quality rural amenity area • Rural Production • Mixed Rural • Rural Coastal • Future Urban • Rural 1-3* • Rural 2* • Rural 3* • Landform 1-7*	Air quality moderate medium to high amenity area • Light Industry (outside Reduced Air Quality Amenity Overlay) • Commercial 5*	Air quality reduced amenity area • Light Industry • Port Precinct • Port of Onehunga • Gabor Place Or in the alternative, as proposed by the Heavy Industry Working Group: Reduced Air Quality reduced Amenity Overlay area • Heavy Industry	Air quality reduced amenity area • Special Purpose - Quarry • Commercial 6 zones*
Coffee roasting at a loading rate of green coffee beans of between greater than 50kg/hour and not exceeding 250kg/hour with a total weekly production of more than 100kg	P	P	P	P	P
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 controls	D	D	D	D	D
Drying of milk products to produce milk powders	D	D	D	D	D
Extraction, distillation or purification of animal or vegetable fats and oils	D	D	D	D	D
Manufacture of animal casings	D	D	D	D	D
Manufacture of yeast or starch	D	D	D	D	D

Activity	Air quality high amenity area • all other zones (including all coastal zones and the HGI zones)	Air quality rural amenity area • Rural Production • Mixed Rural • Rural Coastal • Future Urban • Rural 1-3* • Rural 2* • Rural 3* • Landform 1-7* 5*	Air quality moderate medium to high amenity area • Light Industry (outside Reduced Air Quality Amenity Overlay) • Commercial	Air quality reduced amenity area • Light Industry • Port Precinct • Port of Onehunga • Gabor Place Or in the alternative, as proposed by the Heavy Industry Working Group: Reduced Air Quality reduced Amenity Overlay area • Heavy Industry	Air quality reduced amenity area • Special Purpose - Quarry • Commercial 6 zones*
Pet food manufacture by the application of heat	D	D	D	D	D
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
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

Activity	Air quality high amenity area • all other zones (including all coastal zones and the HGI zones)	Air quality rural amenity area • Rural Production • Mixed Rural • Rural Coastal • Future Urban • Rural 1-3* • Rural 2* • Rural 3* • Landform 1-7* 5*	Air quality moderate medium to high amenity area • Light Industry (outside Reduced Air Quality Amenity Overlay) • Commercial	Air quality reduced amenity area • Light Industry • Port Precinct • Port of Onehunga • Gabor Place Or in the alternative, as proposed by the Heavy Industry Working Group: Reduced Air Quality reduced Amenity Overlay area • Heavy Industry	Air quality reduced amenity area • Special Purpose - Quarry • Commercial 6 zones*
Rendering, reduction or drying of animal matter through the application of heat	D	D	D	D	D
Treatment of abattoir waste or abattoir wastewater on the premises	D	D	D	D	D
Wool scouring operations or dag crushing	D	D	D	D	D
Mobile sources <u>and tunnels</u>					
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 controls do not apply)	P	P	P	P	P

Activity	Air quality high amenity area • all other zones (including all coastal zones and the HGI zones)	Air quality rural amenity area • Rural Production • Mixed Rural • Rural Coastal • Future Urban • Rural 1-3* • Rural 2* • Rural 3* • Landform 1-7* 5*	Air quality moderate medium to high amenity area • Light Industry (outside Reduced Air Quality Amenity Overlay) • Commercial	Air quality reduced amenity area • Light Industry • Port Precinct • Port of Onehunga • Gabador Place Or in the alternative, as proposed by the Heavy Industry Working Group: Reduced Air Quality reduced Amenity Overlay area • Heavy Industry	Air quality reduced amenity area • Special Purpose - Quarry • Commercial 6 zones*
Discharges to air from tunnels up to 220m long that are used for motor vehicles other mobile sources (permitted controls do not apply)	P	P	P	P	P
Discharges to air from tunnels used for motor vehicles other mobile sources that do not comply with permitted controls	D	D	D	D	D
<u>Discharges to air from motor vehicle and rail tunnels established before 30 September 2013</u>	<u>P</u>	<u>P</u>	<u>P</u>	<u>P</u>	<u>P</u>

Activity	Air quality high amenity area • all other zones (including all coastal zones and the HGI zones)	Air quality rural amenity area • Rural Production • Mixed Rural • Rural Coastal • Future Urban • Rural 1-3* • Rural 2* • Rural 3* • Landform 1-7* 5*	Air quality moderate medium to high amenity area • Light Industry (outside Reduced Air Quality Amenity Overlay) • Commercial	Air quality reduced amenity area • Light Industry • Port Precinct • Port of Onehunga • Gabor Place Or in the alternative, as proposed by the Heavy Industry Working Group: Reduced Air Quality reduced Amenity Overlay area • Heavy Industry	Air quality reduced amenity area • Special Purpose - Quarry • Commercial 6 zones*
Discharges to air from motor vehicle tunnels established from 30 September 2013 with a Low or Medium Risk Rating (as assessed under Tables 1 and 2 Permitted Activity Controls 3.1.7)	P	P	P	P	P
Discharges to air from motor vehicle tunnels after 30 September 2013 with a High Risk Rating (as assessed under Tables 1 and 2 Permitted Activity Control 3.1.7)	RD	RD	RD	RD	RD
Discharges to air from rail tunnels established from 30 September 2013 that only carry electric-powered locomotives	P	P	P	P	P

Activity	Air quality high amenity area • all other zones (including all coastal zones and the HGI zones)	Air quality rural amenity area • Rural Production • Mixed Rural • Rural Coastal • Future Urban • Rural 1-3* • Rural 2* • Rural 3* • Landform 1-7*	Air quality moderate medium to high amenity area • Light Industry (outside Reduced Air Quality Amenity Overlay) • Commercial 5*	Air quality reduced amenity area • Light Industry • Port Precinct • Port of Onehunga • Gabor Place Or in the alternative, as proposed by the Heavy Industry Working Group: Reduced Air Quality reduced Amenity Overlay area • Heavy Industry	Air quality reduced amenity area • Special Purpose - Quarry • Commercial 6 zones*
Discharges to air from rail tunnels established from 30 September 2013 that carry any diesel-powered locomotives	RD	RD	RD	RD	RD
Motor Fuel Storage					
Air discharges of volatile organic compounds (including organic solvents) from: - dispensing of motor fuels - ventilation or displacement of air or vapour from storage tanks containing motor fuels - ventilation or displacement of air or vapour from motor fuel tankers (excluding petrol vapour)	P	P	P	P	P

Activity	Air quality high amenity area • all other zones (including all coastal zones and the HGI zones)	Air quality rural amenity area • Rural Production • Mixed Rural • Rural Coastal • Future Urban • Rural 1-3* • Rural 2* • Rural 3* • Landform 1-7*	Air quality moderate medium to high amenity area • Light Industry (outside Reduced Air Quality Amenity Overlay) • Commercial 5*	Air quality reduced amenity area • Light Industry • Port Precinct • Port of Onehunga • Gabador Place Or in the alternative, as proposed by the Heavy Industry Working Group: Reduced Air Quality reduced Amenity Overlay area • Heavy Industry	Air quality reduced amenity area • Special Purpose - Quarry • Commercial 6 zones*
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 controls	RD	RD	RD	RD	RD
Petrol storage greater than 1 million litres on-site	RD	RD	RD	RD	RD
Outdoor burning					
Burning of waste, including: - municipal, commercial, institutional, domestic or industrial wastes - wood that is painted or chemically treated - plastic (including agrichemical containers)	Pr	Pr	Pr	Pr	Pr

Activity	Air quality high amenity area • all other zones (including all coastal zones and the HGI zones)	Air quality rural amenity area • Rural Production • Mixed Rural • Rural Coastal • Future Urban • Rural 1-3* • Rural 2* • Rural 3* • Landform 1-7* 5*	Air quality moderate medium to high amenity area • Light Industry (outside Reduced Air Quality Amenity Overlay) • Commercial	Air quality reduced amenity area • Light Industry • Port Precinct • Port of Onehunga • Gabor Place Or in the alternative, as proposed by the Heavy Industry Working Group: Reduced Air Quality reduced Amenity Overlay area • Heavy Industry	Air quality reduced amenity area • Special Purpose - Quarry • Commercial 6 zones*
<p>and silage wrap), rubber and paint</p> <ul style="list-style-type: none"> - sewage sludge or screenings - motor vehicles and motor vehicle parts - pathological, clinical or veterinary wastes - solid, liquid or gaseous chemical wastes - construction or demolition waste - road seal and bitumen - tyres - oil (including crude oil, fuel oil sludge, waste oil, refined oil products such as diesel fuel, kerosene and motor gasoline) - fuels with more than 0.5 percent by weight sulphur content - coatings from wire or 					

<p>Activity</p>	<p>Air quality high amenity area <ul style="list-style-type: none"> • all other zones (including all coastal zones and the HGI zones) </p>	<p>Air quality rural amenity area <ul style="list-style-type: none"> • Rural Production • Mixed Rural • Rural Coastal • Future Urban • Rural 1-3* • Rural 2* • Rural 3* • Landform 1-7* 5* </p>	<p>Air quality moderate medium to high amenity area <ul style="list-style-type: none"> • Light Industry (outside Reduced Air Quality Amenity Overlay) • Commercial </p>	<p>Air quality reduced amenity area <ul style="list-style-type: none"> • Light Industry • Port Precinct • Port of Onehunga • Gaborator Place <p>Or in the alternative, as proposed by the Heavy Industry Working Group:</p> <ul style="list-style-type: none"> • Reduced Air Quality reduced Amenity Overlay area • Heavy Industry </p>	<p>Air quality reduced amenity area <ul style="list-style-type: none"> • Special Purpose - Quarry • Commercial 6 zones* </p>
<p>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>					

Activity	Air quality high amenity area • all other zones (including all coastal zones and the HGI zones)	Air quality rural amenity area • Rural Production • Mixed Rural • Rural Coastal • Future Urban • Rural 1-3* • Rural 2* • Rural 3* • Landform 1-7* 5*	Air quality moderate medium to high amenity area • Light Industry (outside Reduced Air Quality Amenity Overlay) • Commercial	Air quality reduced amenity area • Light Industry • Port Precinct • Port of Onehunga • Gabador Place Or in the alternative, as proposed by the Heavy Industry Working Group: Reduced Air Quality reduced Amenity Overlay area • Heavy Industry	Air quality reduced amenity area • Special Purpose - Quarry • Commercial 6 zones*
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 boundary (includes braziers, firepits, barbecues, umus, hangis, domestic smokehouses and other ethnic cooking fires)	P	P	P	P	P
Dead farm animals – outdoor burning of up to 1.5t/day	Pr eExceptions: Permitted in Countryside living and Rural Conservation	P	Pr	Pr	Pr P

<p>Activity</p>	<p>Air quality high amenity area</p> <ul style="list-style-type: none"> • all other zones (including all coastal zones and the HGI zones) 	<p>Air quality rural amenity area</p> <ul style="list-style-type: none"> • Rural Production • Mixed Rural • Rural Coastal • Future Urban • Rural 1-3* • Rural 2* • Rural 3* • Landform 1-7* 5* 	<p>Air quality moderate medium to high amenity area</p> <ul style="list-style-type: none"> • Light Industry (outside Reduced Air Quality Amenity Overlay) • Commercial 	<p>Air quality reduced amenity area</p> <ul style="list-style-type: none"> • Light Industry • Port Precinct • Port of Onehunga • Gabor Place <p>Or in the alternative, as proposed by the Heavy Industry Working Group:</p> <ul style="list-style-type: none"> • Reduced Air Quality reduced Amenity Overlay area • Heavy Industry 	<p>Air quality reduced amenity area</p> <ul style="list-style-type: none"> • Special Purpose - Quarry • Commercial 6 zones*
	<p><u>zones in a Rural Fire District</u></p> <p>Permitted in <u>Large Lot and Countryside Living zones in the Urban Fire District</u> <u>providing the on property is greater than 1ha and if a council fire permit is obtained</u></p>				
<p>Dead farm animals – outdoor burning of more than 1.5t/day</p>	<p>Pr</p> <p><u>Exceptions: Restricted discretionary in Countryside living and Rural Conservation</u></p>	<p>RD</p>	<p>Pr</p>	<p>Pr</p>	<p>Pr</p>

Activity	Air quality high amenity area • all other zones (including all coastal zones and the HGI zones)	Air quality rural amenity area • Rural Production • Mixed Rural • Rural Coastal • Future Urban • Rural 1-3* • Rural 2* • Rural 3* • Landform 1-7* 5*	Air quality moderate medium to high amenity area • Light Industry (outside Reduced Air Quality Amenity Overlay) • Commercial 5*	Air quality reduced amenity area • Light Industry • Port Precinct • Port of Onehunga • Gabor Place Or in the alternative, as proposed by the Heavy Industry Working Group: Reduced Air Quality reduced Amenity Overlay area • Heavy Industry	Air quality reduced amenity area • Special Purpose - Quarry • Commercial 6 zones*
	<p><u>zones in a Rural Fire District</u></p> <p>Restricted discretionary in <u>Large Lot, Countryside Living and Coastal Settlement zones in the Urban Fire District</u> providing the <u>on</u> property <u>is</u> greater than 1ha <u>and if</u> a council fire permit is obtained</p>				
Fireworks (domestic use of) <u>below 450kg (as net explosive quantity)</u>	<u>P</u>	<u>P</u>	<u>P</u>	<u>P</u>	<u>P</u>

Activity	Air quality high amenity area • all other zones (including all coastal zones and the HGI zones)	Air quality rural amenity area • Rural Production • Mixed Rural • Rural Coastal • Future Urban • Rural 1-3* • Rural 2* • Rural 3* • Landform 1-7* 5*	Air quality moderate medium to high amenity area • Light Industry (outside Reduced Air Quality Amenity Overlay) • Commercial	Air quality reduced amenity area • Light Industry • Port Precinct • Port of Onehunga • Gaboror Place Or in the alternative, as proposed by the Heavy Industry Working Group: Reduced Air Quality reduced Amenity Overlay area • Heavy Industry	Air quality reduced amenity area • Special Purpose - Quarry • Commercial 6 zones*
Fireworks (commercial use of) more than 450kg (as net explosive quantity)	RD	RD	RD	RD	RD
Outdoor burning of any material for the purpose of fire emergency service training and investigation	RD exceptions: permitted in Large Lot and Countryside Living zones providing the property is greater than 1ha and a council fire permit is obtained	P	P	P	P
Outdoor burning of any material for the purpose of fire emergency service training and investigation not meeting the permitted activity controls	RD	RD	RD	RD	RD

Activity	Air quality high amenity area • all other zones (including all coastal zones and the HGI zones)	Air quality rural amenity area • Rural Production • Mixed Rural • Rural Coastal • Future Urban • Rural 1-3* • Rural 2* • Rural 3* • Landform 1-7* 5*	Air quality moderate medium to high amenity area • Light Industry (outside Reduced Air Quality Amenity Overlay) • Commercial 5*	Air quality reduced amenity area • Light Industry • Port Precinct • Port of Onehunga • Gabor Place Or in the alternative, as proposed by the Heavy Industry Working Group: Reduced Air Quality reduced Amenity Overlay area • Heavy Industry	Air quality reduced amenity area • Special Purpose - Quarry • Commercial 6 zones*
Outdoor burning of any material required by Ministry of Primary Industries or designated authorities under the Health Act 1956 <u>or Biosecurity Act 1993</u>	RD_P exceptions: Permitted in Large Lot and Countryside Living-zones providing the property is greater than 1ha and a council fire permit is obtained	P	RD_P	RD_P	RD_P
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	RD_P
Outdoor burning of untreated wood, paper, and greenwaste (that was	Pr eExceptions: Permitted in	P	Pr	Pr	Pr_P

<p>Activity</p>	<p>Air quality high amenity area • all other zones (including all coastal zones and the HGI zones)</p>	<p>Air quality rural amenity area • Rural Production • Mixed Rural • Rural Coastal • Future Urban • Rural 1-3* • Rural 2* • Rural 3* • Landform 1-7* 5*</p>	<p>Air quality moderate medium to high amenity area • Light Industry (outside Reduced Air Quality Amenity Overlay) • Commercial 5*</p>	<p>Air quality reduced amenity area • Light Industry • Port Precinct • Port of Onehunga • Gabador Place</p> <p>Or in the alternative, as proposed by the Heavy Industry Working Group:</p> <p>Reduced Air Quality reduced Amenity Overlay area • Heavy Industry</p>	<p>Air quality reduced amenity area • Special Purpose - Quarry • Commercial 6 zones*</p>
<p>generated on the premises where it is to be burned <u>or on property under same ownership or operation</u>) except where <u>expressly</u> allowed for by another rule in this table</p>	<p><u>Countryside living and Rural Conservation zones in a Rural Fire District</u></p> <p>Permitted in <u>Large Lot and Countryside Living zones in the Urban Fire District</u> <u>providing the on property is greater than 1ha and if a council fire permit is obtained</u></p>				

Activity	Air quality high amenity area • all other zones (including all coastal zones and the HGI zones)	Air quality rural amenity area • Rural Production • Mixed Rural • Rural Coastal • Future Urban • Rural 1-3* • Rural 2* • Rural 3* • Landform 1-7* 5*	Air quality moderate medium to high amenity area • Light Industry (outside Reduced Air Quality Amenity Overlay) • Commercial 5*	Air quality reduced amenity area • Light Industry • Port Precinct • Port of Onehunga • Gabor Place Or in the alternative, as proposed by the Heavy Industry Working Group: Reduced Air Quality reduced Amenity Overlay area • Heavy Industry	Air quality reduced amenity area • Special Purpose - Quarry • Commercial 6 zones*
<p><u>Outdoor burning of untreated wood, paper, and greenwaste (not generated on the premises where it is to be burned) except where allowed for by another rule in this table</u></p>	<p><u>Pr</u> <u>Exceptions:</u> <u>Restricted discretionary in Countryside living and Rural Conservation zones in a Rural Fire District</u> <u>Restricted discretionary in Countryside Living zones in the Urban Fire District on properties greater than 1ha if a council fire permit is obtained</u></p>	<p><u>RD</u></p>	<p><u>Pr</u></p>	<p><u>Pr</u></p>	<p><u>Pr</u></p>
<p>Rural activities</p>					

Activity	Air quality high amenity area • all other zones (including all coastal zones and the HGI zones)	Air quality rural amenity area • Rural Production • Mixed Rural • Rural Coastal • Future Urban • Rural 1-3* • Rural 2* • Rural 3* • Landform 1-7*	Air quality moderate medium to high amenity area • Light Industry (outside Reduced Air Quality Amenity Overlay) • Commercial 5*	Air quality reduced amenity area • Light Industry • Port Precinct • Port of Onehunga • Gabador Place Or in the alternative, as proposed by the Heavy Industry Working Group: Reduced Air Quality reduced Amenity Overlay area • Heavy Industry	Air quality reduced amenity area • Special Purpose - Quarry • Commercial 6 zones*
Animal feedlots for cattle	Pr	NC	NC	NC	NC
Disposal of livestock and offal, using offal holes or shallow trenches	D	P	D	D	P
Disposal of livestock and offal using offal holes or shallow trenches not complying with the permitted activity controls	NC	RD	NC	NC	RD
<u>Poultry hatchery's</u>	<u>D</u>	<u>P</u>	<u>P</u>	<u>P</u>	<u>P</u>
Intensive farming of up to 10,000 poultry	D	P	D	D	P
Intensive farming of up to 10,000 poultry that does not comply with the permitted activity controls	NC	RD	NC	NC	P
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

Activity	Air quality high amenity area • all other zones (including all coastal zones and the HGI zones)	Air quality rural amenity area • Rural Production • Mixed Rural • Rural Coastal • Future Urban • Rural 1-3* • Rural 2* • Rural 3* • Landform 1-7*	Air quality moderate medium to high amenity area • Light Industry (outside Reduced Air Quality Amenity Overlay) • Commercial 5*	Air quality reduced amenity area • Light Industry • Port Precinct • Port of Onehunga • Gabor Place Or in the alternative, as proposed by the Heavy Industry Working Group: Reduced Air Quality reduced Amenity Overlay area • Heavy Industry	Air quality reduced amenity area • Special Purpose - Quarry • Commercial 6 zones*
Intensive farming established from 21 October 2001 housing between 10,000 to 180,000 chickens	NC	RD	NC	NC	RD
Intensive farming of more than 25 pig equivalents or any number of poultry not meeting permitted, controlled or restricted discretionary controls	NC	D	NC	NC	D
<u>Intensive farming not covered by any other rule</u>	<u>NC</u>	<u>D</u>	<u>NC</u>	<u>NC</u>	<u>D</u>
Manufacture and storage of silage	D	P	D	D	P
Waste processes					
Composting: - of refuse, waste, organic materials or green wastes where the total amount on site is less <u>not more</u> than 10m ³	P	P	P	P	P

Activity	Air quality high amenity area • all other zones (including all coastal zones and the HGI zones)	Air quality rural amenity area • Rural Production • Mixed Rural • Rural Coastal • Future Urban • Rural 1-3* • Rural 2* • Rural 3* • Landform 1-7* 5*	Air quality moderate medium to high amenity area • Light Industry (outside Reduced Air Quality Amenity Overlay) • Commercial	Air quality reduced amenity area • Light Industry • Port Precinct • Port of Onehunga • Gabor Place Or in the alternative, as proposed by the Heavy Industry Working Group: Reduced Air Quality reduced Amenity Overlay area • Heavy Industry	Air quality reduced amenity area • Special Purpose - Quarry • Commercial 6 zones*
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 ³ and 50m ³	D	P	P	P	P
Composting, where the operation is not fully enclosed: - of only greenwaste where the total amount on site is between 10m ³ and 100m ³	D	P	P	P	P
Composting, where the operation is fully enclosed: - of refuse, waste, organic materials or green wastes where the total amount on site is between more than 10m ³ and not exceeding 100m ³	RD	P	P	P	P

Activity	Air quality high amenity area • all other zones (including all coastal zones and the HGI zones)	Air quality rural amenity area • Rural Production • Mixed Rural • Rural Coastal • Future Urban • Rural 1-3* • Rural 2* • Rural 3* • Landform 1-7* 5*	Air quality moderate medium to high amenity area • Light Industry (outside Reduced Air Quality Amenity Overlay) • Commercial	Air quality reduced amenity area • Light Industry • Port Precinct • Port of Onehunga • Gabor Place Or in the alternative, as proposed by the Heavy Industry Working Group: Reduced Air Quality reduced Amenity Overlay area • Heavy Industry	Air quality reduced amenity area • Special Purpose - Quarry • Commercial 6 zones*
Composting where the operation is fully enclosed: - of refuse, waste, organic materials or green wastes between from 100m ³ and not exceeding 1000m ³	D	RD	RD	RD	RD
Composting – any other composting including that not meeting permitted and restricted discretionary activity controls	D	D	D	D	D
Greenwaste collection stations	P	P	P	P	P
Greenwaste collection stations not meeting the permitted activity controls	D	RD	RD	RD	RD
Refuse transfer stations with less than up to 30m ³ of refuse or 500m ³ of green waste	D	P	P	P	P

Activity	Air quality high amenity area • all other zones (including all coastal zones and the HGI zones)	Air quality rural amenity area • Rural Production • Mixed Rural • Rural Coastal • Future Urban • Rural 1-3* • Rural 2* • Rural 3* • Landform 1-7* 5*	Air quality moderate medium to high amenity area • Light Industry (outside Reduced Air Quality Amenity Overlay) • Commercial	Air quality reduced amenity area • Light Industry • Port Precinct • Port of Onehunga • Gabor Place Or in the alternative, as proposed by the Heavy Industry Working Group: Reduced Air Quality reduced Amenity Overlay area • Heavy Industry	Air quality reduced amenity area • Special Purpose - Quarry • Commercial 6 zones*
Refuse transfer stations with more than 30m ³ of refuse or 500m ³ of green waste	NC	C	C	C	C
Refuse transfer stations not meeting the permitted or controlled activity controls	D	RD	RD	RD	RD
Recycling stations where no greenwaste is collected on site	D	P	P	P	P
Recycling stations not meeting the permitted activity controls	NC	RD	RD	RD	RD
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

Activity	Air quality high amenity area • all other zones (including all coastal zones and the HGI zones)	Air quality rural amenity area • Rural Production • Mixed Rural • Rural Coastal • Future Urban • Rural 1-3* • Rural 2* • Rural 3* • Landform 1-7* 5*	Air quality moderate medium to high amenity area • Light Industry (outside Reduced Air Quality Amenity Overlay) • Commercial	Air quality reduced amenity area • Light Industry • Port Precinct • Port of Onehunga • Gabador Place Or in the alternative, as proposed by the Heavy Industry Working Group: Reduced Air Quality reduced Amenity Overlay area • Heavy Industry	Air quality reduced amenity area • Special Purpose - Quarry • Commercial 6 zones*
Landfills receiving waste material, including domestic and industrial wastes	D	D	D	D	D
Landfills that do not comply with restricted discretionary or discretionary activity controls	NC	NC	NC	NC	NC
Treatment of industrial, chemical, pathological or hazardous waste materials prior to disposal which are not generated on site	NC	D	D	D	D
Treatment of wastewater that was generated on-site (on-site wastewater treatment systems) - excluding municipal wastewater	P	P	P	P	P
Treatment of municipal wastewater (municipal wastewater treatment plants)	D	D	D	D	D

Activity	Air quality high amenity area • all other zones (including all coastal zones and the HGI zones)	Air quality rural amenity area • Rural Production • Mixed Rural • Rural Coastal • Future Urban • Rural 1-3* • Rural 2* • Rural 3* • Landform 1-7*	Air quality moderate medium to high amenity area • Light Industry (outside Reduced Air Quality Amenity Overlay) • Commercial 5*	Air quality reduced amenity area • Light Industry • Port Precinct • Port of Onehunga • Gabor Place Or in the alternative, as proposed by the Heavy Industry Working Group: Reduced Air Quality reduced Amenity Overlay area • Heavy Industry	Air quality reduced amenity area • Special Purpose - Quarry • Commercial 6 zones*
Disposal to ground of treated sewage sludge (biosolids) or septage (septic tank cleanings) up to 10t/day	NC	P	D	D	D
Disposal to ground of treated sewage sludge (biosolids) or septage (septic tank cleanings) greater than 10t/day	NC	D	D	D	D
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
Wastewater facility that is for the primary purpose of pumping, or storage or transfer of wastewater and not meeting the permitted activity controls	RD	RD	RD	RD	RD

Activity	Air quality high amenity area • all other zones (including all coastal zones and the HGI zones)	Air quality rural amenity area • Rural Production • Mixed Rural • Rural Coastal • Future Urban • Rural 1-3* • Rural 2* • Rural 3* • Landform 1-7*	Air quality moderate medium to high amenity area • Light Industry (outside Reduced Air Quality Amenity Overlay) • Commercial 5*	Air quality reduced amenity area • Light Industry • Port Precinct • Port of Onehunga • Gabor Place Or in the alternative, as proposed by the Heavy Industry Working Group: Reduced Air Quality reduced Amenity Overlay area • Heavy Industry	Air quality reduced amenity area • Special Purpose - Quarry • Commercial 6 zones*
Other processes					
Nuclear power generation	Pr	Pr	Pr	Pr	Pr

2. Notification

~~1. All restricted discretionary activities for discharges of contaminants to air will be subject to the normal tests for notification in the relevant sections of the RMA.~~

1. The following discharges of contaminants to air will be subject to the normal tests for notification under the relevant sections of the RMA:

a. Waste processes (excluding landfills and wastewater activities)

b. Rural activities

3. Controls

3.1 Permitted activities

3.1.1 General Controls

The following controls apply to all permitted activities that discharge contaminants to air except from mobile sources. ~~No permitted activity controls apply to mobile sources.~~

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.

Permitted activity controls do not apply to the following activities listed in 4.1.1. Activity Table:

- a. mobile sources
- b. fire fighting and other emergency response activities

Explanation

The determination of whether a discharge of contaminants into air is the cause of noxious, dangerous, offensive or objectionable effects will be made by council officers experienced in such assessments. When making the determination in relation to odour and dust, the FIDOL factors (frequency, intensity, duration, offensiveness and location) will be used.

The use of the FIDOL factors provides a framework for making an objective and consistent assessment of the degree of effects. The nature of the zone and amenity provisions for each zone, which the discharges of contaminants into air are affecting, will be taken into account when making the assessment.

3.1.2 Chemical and metallurgical processes

1. 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:
 - a. before discharging to air, all emissions must pass through control equipment that achieves a particulate emission rate of no more than 10mg/m³ (STP, and dry gas basis ~~and 12 percent CO₂ by volume~~)
 - b. 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 performance controls.
2. Thermal metal spraying, including the melting of any metal or metal alloy, where discharges to air are through particulate control equipment:
 - a. the process must be contained within a spray booth
 - b. before discharging to air, all emissions must pass through control equipment that achieves a particulate emission rate of no more than 30mg/m³ (STP, and dry gas basis ~~and 12 per cent CO₂ by volume~~).
3. Spray application of surface coatings containing diisocyanates or organic plasticisers for maintenance of significant infrastructure:
 - a. there must be no activities sensitive to air discharges within 30m of the activity
 - b. there must be an exclusion zone that prevents public access within 15m of the activity
 - c. 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.
34. Spray application of surface coatings containing diisocyanates or organic plasticisers in a spray booth:
 - a. the spray booth or room must be fitted with a suitable filter system to minimise air discharges of diisocyanates and organic plasticisers

b. 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 ~~rain-excluder cap that impedes the upward discharge of emissions~~.

5. The blending of fertilisers undertaken on farms for use on site or on properties under the same ownership or operation.

3.1.3 Combustion activities

1. Small combustion sources established before 1 May 2014

a. this rule will cease to be in effect after 30 April 2024

b. the activity must have been lawfully established as a permitted activity before 1 May 2014

c. 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

d. there must be no visible emissions resulting from the combustion process other than heat haze and clean steam during normal operation

e. 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. ~~If~~ 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 and must obtain a Certificate of Compliance to confirm the permitted activity status of the discharge~~

f. rain excluders must not impede the upward discharge of combustion gases

g. 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

h. the sulphur content of the fuel must be no more than 0.5 per cent by weight

i. 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)

j. any wood (including wood products such as wood chips and pellets) must not be not painted, tanned (treated with copper, chrome and arsenic) or treated with preservatives or impregnated with chemicals, including chipboard

k. maintenance of combustion appliances must occur in accordance with manufacturer's specifications and maintenance records are made available to council officers on request

l. the council must be provided with the following information on 1 May 2016 and 1 May 2021:

i. location of combustion process and stack

ii. fuel source

iii. type of device and total ~~generating capacity~~ gross heat release

iv. details of any particulate emissions control employed.

Explanation

Combustion sources lawfully established as permitted activities before the notification date of the Unitary Plan may continue in compliance with the control above until 30 April 2024. From 1 May 2024 all small combustion activities operating under clause 3.1.3.1 above must comply with rule 3.1.3.2 below or obtain a consent.

2. Small combustion sources established from 1 May 2014

a. the activity must not include ~~internal~~ combustion engines/generators

- b. there must be no visible emissions resulting from the combustion process other than heat haze and clean steam during normal operation
- c. 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. ~~If 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 ~~and must obtain a Certificate of Compliance to confirm the permitted activity status of the discharge~~
- d. rain excluders must not impede the upward discharge of combustion gases
- e. the sulphur content of the fuel is no more than 0.5 per cent by weight
- f. maintenance of combustion appliances must occur in accordance with manufacturer's specifications and maintenance records must be made available to council officers on request
- g. the council must be provided with the following information on 1 May 2016 and 1 May 2021:
 - i. location of combustion process and stack
 - ii. fuel source
 - iii. type of device and total ~~generating capacity gross heat release~~
 - iv. details of any particulate emissions control employed.

3.1.4 Dust generating processes

1. Blasting (dry abrasive) within a permanent facility (spray booth) using abrasive material containing less than 5 per cent dry weight free silica:
 - a. emissions must pass through a filtration system that achieves a particulate emission rate of 30mg/m³ (STP and dry gas basis)
 - b. emissions control equipment must be maintained in accordance with manufacturers specifications
 - c. a differential pressure gauge must be installed across the filtration system and the processing monitoring equipment must be fitted with audible alarms
 - d. 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 in a. and c. above
 - e. all work areas and surrounding areas must be kept clean and substantially free of accumulations of deposited blasting material and other debris
 - f. abrasive material used for the blasting must contain less than 2 per cent by dry weight dust able to pass a 0.15 mm sieve.
2. Blasting (vacuum) using abrasive material containing less than 5 per cent dry weight free silica:
 - a. material collected by the vacuum device must pass through a fabric filter or other collection system capable of achieving a non-visible discharge
 - b. all work areas and surrounding areas must be kept clean and substantially free of accumulations of deposited abrasive blasting material and other debris.
3. Blasting (sweep) using abrasive material containing less than 5 per cent dry weight free silica:
 - a. all work areas and surrounding areas must be kept clean and substantially free of accumulations of deposited abrasive blasting material and other debris.
4. Blasting (abrasive) outside of permanent facility (spray booth) using abrasive material containing less than 5 per cent dry weight free silica:
 - a. Blasting must not be done:
 - i. within 50m of a public road, or
 - ii. within 100m of an occupied building

b. Waste and debris resulting from abrasive blasting must be removed from the site of the blasting to the extent practicable

c. Dry abrasive blasting:

i. must be done more than 1m above ground level, and

ii. may only be done if covers or screens are used to mitigate the effects of any contaminants discharges by the blasting.

4. Cement storage, handling, redistribution, or packaging, ~~where cement is stored in fully enclosed silos:~~

a. ~~cement is stored in fully enclosed silos that must be fitted with an appropriate filtration system with a filter surface area of at least 24m² which is certified by an independent chartered professional engineer as being designed to have a maximum emission rate of 30mg/m³ (STP and dry gas basis)~~

b. There should be no visible discharges of dust

~~b.c.~~ cement must be delivered via a fully enclosed system

ed. 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.

5. 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:

a. an effective watering system must be available to minimise dust emissions

b. operation of the crusher must occur on no more than 180 days over the duration of the development project, ~~or~~

c. 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.

3.1.5 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.

3.1.6 Emergency Services

1. Burning of any material for the purpose of fire emergency service training and or investigation:

a. all adjacent neighbours must be advised in writing at least 48 hours prior to the fire being lit

b. 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

c. 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.

3.1.67 Food, animal or plant matter processes

1. Coffee roasting at a loading rate of green coffee beans between 50kg/hour and 250kg/hour ~~with a total weekly production of more than 100kg~~

- a. the operation ~~must have been~~ was established prior to 1 May 2014:
 - i. 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.
- b. the operation ~~must have been~~ was established, or production increased, on or after 1 May 2014 and air emissions are discharged through an afterburner:
 - i. the afterburner must have a minimum operating temperature of 750 degrees C and a residence time of 0.5 seconds
 - ii. the afterburner must have a temperature gauge with readout easily accessible to the operator
 - iii. 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.

3.1.8 Mobile sources and tunnels

Tables 1 and 2 are to be utilised to assess whether the proposed motor vehicle tunnel is a permitted or restricted discretionary activity.

Table 1: Risk Assessment Process

<u>Individual Rating</u>	<u>Is the project in an area where PM₁₀ National Environmental Standard Air Quality for PM₁₀ is exceeded?</u> <u>OR</u> <u>Does the annual average nitrogen dioxide at the nearest equivalent roadside monitoring site exceed 30 µg/m³?</u>	<u>How many activities sensitive to air discharges are there located within 200m of any point of discharge?</u>	<u>What is the annual average daily traffic flow in vehicles per day at the opening year?</u>
<u>Low</u>	<u>No</u>	<u><10</u>	<u><10,000</u>
<u>Medium</u>	<u>Not applicable</u>	<u>10-50</u>	<u>10,000-50,000</u>
<u>High</u>	<u>Yes</u>	<u>>50</u>	<u>>50,000</u>

Table 2: Overall Risk Rating

<u>Overall Rating</u>	<u>Individual Rating</u>
<u>Low</u>	<u>Two or more Low results in Table 1</u>
<u>Medium</u>	<u>Two or more Medium results in Table 1</u>

	<p><u>OR</u></p> <p><u>One Low, one Medium and one High result in Table 1.</u></p>
<u>High</u>	<u>Two or more High results in Table 1.</u>

3.1.79 Motor fuel storage

1. The storage tank containing ~~motor fuels~~ petrol must have been installed prior to 1 January 2007; or the storage tank containing ~~motor fuels~~ 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.

3.1.810 Outdoor burning

1. Outdoor burning of any material required by Ministry of Primary Industries or designated authorities under the Health Act 1965 or Biosecurity Act 1993:

- a. all adjacent neighbours must be advised in writing at least 48 hours prior to the fire being lit
- b. the Auckland Council Principal Rural Fire Officer and Auckland Council Pollution Response Team 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
- c. 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.

2. To minimise the discharge of contaminants into air from outdoor burning and burning within a backyard or single chamber incinerator such that it will comply with the general permitted activity control a fire must:

- a. use untreated wood or vegetation that is dry and well seasoned
- b. be located as far as practicable from adjacent premises
- c. be undertaken during daylight hours
- d. be supervised
- e. be located at least 3m from any combustible material including buildings, fences, hedges and trees
- f. be undertaken in accordance with any instructions provided by the manufacturer if vegetation has been treated or sprayed by an agrichemical
- g. be undertaken in suitable weather conditions, for example light winds

Note:

Outdoor burning activities permitted by a rule in this plan may require a fire permit under other legislation including Forest and Rural Fires Act 1977 and council bylaws.

3.1.911 Waste processes

1. Green waste collection stations:

- a. green wastes must be kept on-site for not more than three days from date of receipt

- b. there must be no shredding of green waste.
- 2. Refuse transfer stations where less than 30m³ of refuse or 500m³ of green waste is kept on site
 - a. green waste must be kept on-site for no more than three days from the date of receipt
 - b. there must be no shredding of green waste.
- 3. Wastewater facility that is for the primary purpose of pumping or transfer or storage of raw or partially treated wastewater.
 - a. storage of wastewater must be within an enclosed tank of less than 4000m³; or
 - b. storage of wastewater must be within an enclosed tank of between 4000m³ and 10,000m³ that is fitted with an effective odour control system, such as a bio-filter.

3.2 Controlled activities

The following controls apply to specified controlled activities that discharge contaminants to air:

3.2.1 Combustion activities

- 1. Medium combustion sources established from 1 May 2014
 - a. there must be no visible emissions resulting from the combustion process other than heat haze and clean steam
 - b. 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
 - c. rain excluders must not impede the upward discharge of combustion gases
 - d. 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)
 - e. 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)
 - f. 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/m³ (STP, dry gas basis, corrected to 12 percent CO₂ by volume)

3.2.2 Dust generating processes

1. The crushing of minerals and aggregates associated with a mineral extraction activity must be located at least 200 metres from any dwelling located outside the Quarry Zone that is not under the control of the quarry operator.

3.2.23 Rural activities

- 1. 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:
 - a. 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

b. the activity must have a management plan recording all management, operational and monitoring procedures, methodologies and contingency plans necessary to comply with this rule

3.2.34 Waste processes

1. Refuse transfer station with more than 30m³ of refuse or 500m³ of green waste.

a. the refuse station must be located more than 300m from any dwelling or residential zone

b. the premises must be in an industrial or rural area and have either:

i. a minimum separation distance of 300m from any dwelling on another property or any residentially zoned area, or

ii. 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. 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.

c. 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

d. all access and transfer areas must be sealed and designed with sufficient room for the movement of vehicles within the yard area

e. the consent applicant must have clear protocols for:

i. acceptance criteria for materials delivered to the site

ii. odour, dust and litter mitigation

iii. storage, handling and disposal of all types of refuse accepted on the site

f. there must be no shredding of green waste

g. the activity must have an operations plan outlining the protocols developed in accordance with d. above and measures to mitigate or prevent adverse effects beyond the boundary of the premises.

3.3 Restricted discretionary activities

~~3.3.1 Chemical and metallurgical processes~~

~~1. Spray application of surface coatings in a spray booth and containing diisocyanates or organic plasticisers:~~

~~a. the spray application of surface coatings must be undertaken within a spray booth or room that is fitted with a suitable filter system to minimise air discharges of diisocyanates and organic plasticisers~~

~~b. vents from the spray room or booth must discharge vertically, at least 3m above the ridge height of the building and not be fitted with a rain impeder.~~

3.3.21 Combustion activities

1. Medium to large combustion sources ~~for the purpose of raising heat or energy~~

a. there must be no visible emissions resulting from the combustion process other than heat haze and clean steam

b. 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

- c. rain excluders must not impede the upward discharge of combustion gases
- d. 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)
- e. 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)
- f. air discharges from combustion of wood, including untreated wood products such as wood chips and pellets, 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/m³ (STP, dry gas basis, corrected to 12 per cent CO₂ by volume).

3.3.32 Cremation and incineration processes

1. Cremation of human or animal remains, excluding the burning of animal remains covered by outdoor burning rules
 - a. 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.
 - b. the afterburner must be capable of maintaining all gases passing through it at a minimum temperature of 850 degrees C in greater than 6 per cent oxygen for a design residence time of at least two seconds.
 - c. 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.
 - d. a manufacturer guarantee or certification by an independent chartered professional engineer that design of the afterburner system is adequate to meet the criteria specified in a., b., and c. above must be provided.
 - e. the following materials must not be burned:
 - i. coffins constructed or furnished with PVC or melamine
 - ii. cardboard coffins containing chlorine in the wet-strength agent
 - iii. chlorinated plastic packaging for stillbirth, neonatal and foetal remains
 - iv. coffins containing metals (except steel screws and staples) e.g. lead and zinc
 - v. halogenates and wax.

3.3.43 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.

3.3.54 Dust generating processes

1. The quarrying activity 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 controls, a dust management and monitoring plan must be submitted to council that will show the means by which dust will be minimised such that it does not cause nuisance beyond the boundary of the works.

3.3.65 Rural activities

1. Intensive farming established from 21 October 2001 housing between 10,000 to 180,000 chickens:
 - a. 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
 - b. there must be a management plan for the activity detailing:
 - i. environmental objectives and targets, use of best practicable options, performance reviews, checklists
 - ii. shed management details including ventilation and litter management
 - iii. drinker and feeding systems operation
 - iv. waste management and litter disposal
 - v. complaints system and management including schedule of neighbouring properties and contact phone list.

3.4 Discretionary activities

3.4.1 Waste processes

1. Discharges to air from landfills receiving waste materials, including domestic and industrial wastes:
 - a. the landfill must have been issued with a 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; or
 - b. 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; or
 - c. 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.

4. Assessment - Controlled activities

4.1 Matters of control

The council will restrict its control to the following matters when assessing controlled activity resource consent applications.

1. Combustion activities

- a. stack height, design and emission discharge velocity
- b. fuel source, burning rate, emissions controls and maintenance.

2. Dust generating processes

- a. location of activity and distance from activities sensitive to air discharges
- b. Dust mitigation measures
- c. Dust management plan

23. Rural activities

- a. location of activity
- b. dust and odour mitigation methods
- c. type of waste treatment.

34. 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.

4.2 Assessment criteria

- 1. Measures to ensure that discharges to air are minimised as far as practicable, and where appropriate through:
 - a. use of low emission clean burning fuels
 - b. efficient use of energy
 - c. use of best available - practicable option management practices and best practicable option emissions control
 - d. minimisation of fugitive emissions.

- 2. The degree to which conditions of consent can avoid, remedy or mitigate adverse effects on health, amenity, property and the environment including appropriate emissions control technology and best practicable option available - practice management practices

- 3. Whether there are practicable location and method 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.

5. Assessment - Restricted discretionary activities

5.1 Matters of discretion

The council will restrict its discretion to the following matters when assessing restricted discretionary activity resource consent applications.

1. ~~General~~ **All activities**

a. offsets for discharges of PM₁₀ and PM_{2.5}

b. location of site/activity

c. site/plant layout.

2. Chemical and metallurgical 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 and material that can be burnt

d. emissions of odour, dust, visible emissions and hazardous air pollutant, including any mitigation measures

e. management plans

f. emissions control and plant maintenance.

3. 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

g. sensitivity of downwind receiving environment.

4. Cremation and incineration processes

a. quantity, quality and type of discharge and any effects arising from that discharges

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. odour, dust, visible emissions and hazardous air pollutant mitigation measures

e. management plans

f. emissions control and plant maintenance.

5. 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

e. effectiveness of the afterburner for emissions control.

6. 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

e. dust management plan and other management plans.

7. 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

c. odour and dust mitigation measures.

8. Combustion activities

a. quantity, quality and type of discharge and any effects arising from that discharge

b. effect on meeting the Auckland national Ambient Air Quality Standards and Guidelines

c. stack height, design and emissions discharge velocity

d. fuel source, burning rate, emission controls and maintenance.

9. Mobile sources and tunnels

a. Quantity, quality and type of discharge and any effects arising from that discharge

b. Sensitivity of the receiving environment and separation distances between the activity and any activity sensitive to air discharges

910. 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

d. risk assessment and methods to manage any residual risk.

4011. 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

h. emissions control and plant maintenance.

4412. 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 ~~to ensure required~~ 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

g. management plans.

5.2 Assessment criteria

1. The degree to which the ~~national-Auckland~~ Ambient Air Quality Standards ~~and Guidelines~~ ~~and/or nationally and internationally accepted standards, guidelines and guidance~~ are likely to be met ~~at locations where a person might reasonably be exposed to the contaminant over the relevant time period.~~
2. Whether the amount of separation between the activity discharging to air and existing or potential activities sensitive to air discharges is:
 - a. appropriate to mitigate adverse effects on the environment, health and amenity; and
 - b. appropriate to mitigate reverse sensitivity effects.; ~~and~~
 - ~~c. available for the duration of the consent.~~
3. The degree to which conditions of consent can avoid, remedy or mitigate adverse effects including appropriate emissions control technology and ~~use of best practicable option available practice~~ 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 amenity provisions of any zone where the discharge is likely to have an effect are met.
7. Whether the assessment methods, including monitoring and modelling are appropriate to the scale of the discharge and any potential adverse effects.
8. Whether discharges to air are minimised as far as practicable, where appropriate through:
 - ~~a. use of low emission clean burning fuels~~
 - ~~b. efficient use of energy~~
 - c. use of best ~~available~~ ~~practicable option~~ management practices and ~~best practicable option emissions control~~
 - d. minimisation of fugitive emissions
 - e. reduction, reuse or recycling of waste materials relating to waste processes.