

**Ministry of Transport**

# Summary of Submissions on the New Zealand Vehicle Emissions Screening Programme Discussion Document

April 2005

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## Introduction

The New Zealand Vehicle Emissions Screening Programme Discussion Document was released by the Associate Minister of Transport, Hon Judith Tizard, on 22 November 2004 for public consultation. The discussion document outlined preliminary proposals for the vehicle emissions screening programme.

The discussion document was sent to over 800 people/organisations and was available on the Ministry of Transport website, [www.transport.govt.nz](http://www.transport.govt.nz).

Comment was invited on 27 specific questions as well as any general comment. In total, 127 submissions were received from a wide range of people and organisations. This is considered to be a good response.

Submissions were received from:

- The inspection and repair industry (seven submissions).
- Central government agencies (three submissions).
- Other government entities (three submissions).
- Local government (13 submissions).
- Classic/vintage car clubs (nine submissions).
- Other organisations including various equipment suppliers and a wide range of transport groups, community groups and environment groups (27 submissions).
- The general public (65 submissions, 13 of whom identified themselves as being involved in the vehicle repair and inspection industry).

This document contains a summary of the comments received.

## List of submitters

1. Al Yates
2. Alastair Nicholls (WoF Garage)
3. Allan Murray
4. Alvis Car Club of New Zealand
5. Andrew McClintock (MTA Member)
6. Association of Australian Diesel Specialists
7. Auckland City Council
8. Auckland Regional Council
9. Auckland Regional Public Health
10. Automotive Electronic Control Systems (AECS)
11. Basil McCoward
12. Bevan Woodward
13. Bike New Zealand
14. Bikers Rights Organisation New Zealand (BRONZ) (National)
15. Bikers Rights Organisation New Zealand (BRONZ) (Otago)
16. BP New Zealand
17. Brian Anthony McSwigan
18. Bruce Millar
19. Cameron Parsonson
20. Chris Gray
21. Christopher Lee (Engineer)
22. Citroen Car Club of New Zealand
23. Claude Lehwenz
24. Clean Air Auckland
25. Confidential submission
26. Consumers Institute
27. Cycling Advocates Network (CAN)
28. D G Dell (Classic Car)
29. Daimler and Lanchester Owners Club
30. Daniel Wood (WoF Garage)
31. David Brooks
32. David Squire
33. David Sullivan
34. Donald Law
35. Edward Hamilton (Service Station)
36. Employers and Manufactures Association (EMA)
37. Endpoint
38. Engine Dialysis Equipment New Zealand
39. Environment Bay of Plenty
40. Environment Canterbury
41. Environment Waikato
42. Environmental Systems Products Holdings (ESP)
43. Federated Farmers of New Zealand
44. Federation of Motoring Clubs
45. G A Allport
46. Geoff Kreegher (Service Station)
47. Geoff Peterson

48. George Stock and Company
49. Greater Wellington Regional Council
50. Greenhouse Policy Coalition
51. Gurdev Singh
52. Hanzlik (Garage)
53. Independent Motor Vehicle Dealers Association (IMVDA)
54. Institute of Professional Engineers of New Zealand (IPENZ)
55. Jacqui Walters
56. James Cho (Garage)
57. Jane and John Boyens
58. Jeremy Dunnigham
59. Jill Spicer
60. John Cliffe
61. John DeBonnaire
62. John Symonds
63. June Couch
64. Ken McIntosh
65. Ken Turner (WoF Garage)
66. Kevin Collins
67. Kris Bubendorfer
68. Laura Richardson
69. Lloyd Eade (Classic Car)
70. Local Government New Zealand
71. Low Volume Vehicle Technical Association
72. Marlies Neusser
73. Martin Scott
74. MG Car Club (Auckland Centre)
75. MG Car Club (Wellington Centre)
76. Mike Lowe (Classic Car)
77. Ministry for the Environment
78. Ministry of Health
79. Motor Industry Association (MIA)
80. Motor Trade Association (MTA)
81. National Council of Women
82. National Traction Engine Association
83. Nelson City Council
84. New Zealand Automobile Association (AA)
85. New Zealand Buick Enthusiasts Car Club
86. New Zealand Engine Reconditioners Association (NZERA)
87. New Zealand Motor Caravan Association
88. North Shore City Council
89. Northland Regional Council
90. Occupational Safety and Health
91. Owen Mulliss
92. Papakura District Council
93. Patricia Haydon
94. Paul Clutterbuck
95. Peter Conway
96. Peter Glass (Classic Car)
97. Peter Milner (Engineer)
98. Peter Stephenson (Mechanic)

99. Phil Sutton
100. Philip Boardman (WoF Garage)
101. Public Health South
102. R A Culver
103. Ralph Patterson
104. Raychel Smith
105. Road Safety West Coast
106. Road Transport Forum of New Zealand (RTF)
107. Roding New Zealand
108. Rolf Kuchlenz
109. Ross Calgher ( Engineer)
110. Shelagh Coop
111. Stephen Sleep
112. Steve Southall
113. Sustainable Business Network
114. Taranaki Regional Council
115. Terry Cartwright
116. TR Register New Zealand (received two submissions form this car club, one from the President and one from the Secretary)
117. Transit New Zealand
118. Transport Engineering Research New Zealand (TERNZ)
119. Ute Engel
120. Vehicle Inspection New Zealand (VINZ)
121. Vehicle Service Federation (VSF)
122. Vehicle Testing New Zealand (VTNZ)
123. Vintage Car Club of New Zealand
124. W M Creak
125. Waitakere City Council
126. Wayne Tomlinson
127. Yip Chan Li



## Question 1: Do you have comments about how emissions screening might affect vehicle owners?

Seventy-three submitters commented on this question. Three issues were raised consistently throughout the submissions:

- Twenty-seven submitters felt that one of the main effects of emissions screening on vehicle owners would be an increase in cost – that is, it would cost owners more to take their vehicle for a WoF / CoF. Submitters raised this issue more than any other (*AECS, EMA, IMVDA and other submitters*).
- Fourteen submitters felt that vehicle owners would have to face longer inspection times. This issue was the second most cited effect of emissions screening on vehicle owners (*Vehicle Service Federation, VTNZ and other submitters*).
- Twelve submitters felt that emissions screening would lead to an increase in the number of unregistered and unwarranted vehicles on the road (*MIA, Jeremy Dunningham, VINZ and other submitters*).

Seven submitters said that emissions screening would be beneficial because it would help improve a vehicle's overall performance as people would be more likely to take their vehicle for regular tuning/maintenance. These submitters said that fuel efficiency and reliability would improve as a result of this (*Bike NZ, Consumers Institute*). Seven submitters believe that emissions screening would be good for the environment because it would improve air quality and be beneficial for the health of car owners (*ARC, Local Government NZ*).

Comments were made on a number of other effects emissions screening would have on vehicle owners including:

- Resentment toward WoF/CoF would increase.
- Classic cars would be impacted negatively as a result of emissions screening.
- There would be an increase in the number of vehicles withdrawn from the fleet or abandoned by owners.
- Owners would need to keep their vehicles in better condition.
- Many cannot afford the maintenance and repairs that would become necessary.
- Some people would be left with no form of transport if their vehicle failed the emissions test. This could have serious negative consequences on employment for those in rural areas.

## Question 2: Do you have any comments about how emissions screening might affect the vehicle inspection and repair industries?

### **Inspection industry**

Submitters noted that the impact of emissions screening on the vehicle inspection industry would centre on issues (including costs) related to staffing, equipment and inspection premises.

Many submitters commented on the shortage of skilled personnel in the vehicle inspection industry, and noted the need to recruit more staff (*MTA, VTNZ, MIA, Ken Turner Motors, ESP and other submitters*). There was not enough capacity to introduce emissions screening with current staff levels. The MTA estimated that for emissions screening to be introduced, 399 people (inspectors plus management) would need to enter the inspection industry, based on a simple test taking 15 minutes.

Training was identified as a major issue that would take significant time and resource. Ongoing training would be needed (*MTA, ARC, VTNZ and other submitters*).

The cost of emissions testing equipment was an issue: one submitter commented that gas analysers would be the most expensive piece of equipment required for vehicle inspections. As well as initial costs, there would be ongoing costs associated with maintenance, calibration, and equipment repair costs (*AECS, Ken Turner Motors*).

Submitters noted that, in most cases, inspection sites would require alteration before undertaking emissions screening, to comply with occupational safety and health requirements (*IMVDA, VSF, VINZ and other submitters*).

Many submitters noted that the costs associated with providing emissions screening would be passed on to vehicle owners through higher WoF / CoF fees. The initial capital outlay would be prohibitive for some WoF garages. Garages not offering emissions screening might have to stop providing WoF services because their volume of WoF business would drop significantly (*IMVDA, NZ Citroen Car Club and other submitters*). The MTA sought assurance that there would be no direct implications for inspection organisations choosing not to participate in emissions screening.

A number of submitters commented on the requirement to provide one WoF recheck free of charge to vehicle owners failing their initial test. The submitters contended that the free recheck was not viable for emissions screening rechecks (*Ken Turner Motors, George Stock and Co*).

The need for a suitable lead-in time and introductory arrangements was noted. The MTA recommended a two-year lead-in time. Some submitters noted that, if handled properly, the lead-in arrangements could alleviate potential problems related to staff recruitment and training. The MTA suggested a phased-in introduction (e.g. targeting the highest emitters first); another submitter (*MG Car Club Auckland*) suggested that the first cycle of testing could be advisory only – rather than pass/fail.

### **Repair industry**

Submitters noted that the repair industry would face the same problems regarding staff shortages and the need for training, especially training in the repair of new technology vehicles (*NZ Engine Reconditioners, RTF and other submitters*). ESP commented that “it is ultimately the effective repair of the vehicle that is most directly related to emissions reductions”.

The MTA estimated that repairs would take an average of 2.5 hours (MTA pointed out this was a best guess – not based on any study). Based on this assumption, 793 additional repairers would need to be recruited if 20 percent of vehicles tested needed repairs; or 396 additional repairers if 10 percent of vehicles tested needed repairs.

The RTF suggested that certain garages could be authorised to carry out emissions screening checks, in addition to CoF inspection organisations, to alleviate resource limitations.

Several submitters commented on an initial, temporary peak in repair work when emissions screening was introduced. This would then decline over time as the worst-emitting vehicles were repaired or retired from the fleet. This contributed to the argument for suitable introductory arrangements, including increasing industry capacity and skill, to manage the peak (*NZ Motor Caravan Association, ARC, MTA, MIA and other submitters*).

The decline in repair work as the emissions performance of the vehicle fleet improved led to comments about the longevity of the vehicle emissions screening programme. The MTA had concerns about the longevity of the programme in relation to the large industry investment.

Members of the vehicle repair industry noted issues such as the need for specialist equipment, the availability of parts and components, and access to technical information (Vancouver's Air Care programme includes access to a repair database) (*VTNZ, ESP*).

Question 3: What sorts of vehicle characteristics should be used to establish vehicle bands for emissions performance limits (e.g. vehicle age, engine technology, weight)?

Seventy-five submitters commented on this question. The following characteristics for establishing vehicle bands were suggested:

Characteristic	Number of submitters
Vehicle age	51
Engine technology	37
Vehicle type/weight/class (e.g. truck, bus or car)	19
Manufacturer's specifications (standard vehicle was built to)	7
Engine size	5
Total vehicle mileage	5
NZ new/used import	3
Vehicle kilometres travelled (VKT) per annum	3

Almost every submitter acknowledged that it would not be practical or sensible to apply one performance requirement to all vehicles. Only one individual submitter said that there should be only one performance requirement.

Some submitters, including the MTA, commented that the criteria for establishing bands needed to be kept simple for implementation purposes – otherwise it would lead to too much confusion. The more vehicle bands, the more complex and expensive the screening programme would become.

The MTA noted that the removal of catalytic converters would confuse the issue of which vehicle band a vehicle fits in.

The MTA suggested that vehicle bands be based on fuel type, vehicle age and vehicle class. Ideally the emissions category would be printed on the vehicle licence label or a separate label. If this wasn't possible then at least the vehicle class (MA, MC etc) should be printed on the label to assist inspectors.

Some submitters noted that ideally performance limits would be specific to each make and model of vehicle, and would relate to the manufacturer's original specifications. One submitter commented that with new technology vehicles (with On Board Diagnostics) any deviation from the standard the vehicle was built to meet indicates a defect or modification (AECS). However, most submitters accepted that this was not practical to implement, especially for older vehicles (*Australian Diesel Specialists NZ Branch, VINZ*).

Many of the submitters who recommended bands based on vehicle age noted that older, classic cars could not be expected to meet the same emissions requirements as vehicles with newer technologies (*VINZ, TR Register, Vintage Car Club, many individual submitters*).

## Question 4: Do you think the selection of pollutants for which performance limits are being proposed is appropriate?

Fifty-six submissions were received in response to this question. Many submitters did not express an opinion on the selection of pollutants on the grounds that they did not have enough expertise to comment.

Of those who did comment, the majority of submitters agreed that the selection of pollutants identified in the discussion document was appropriate (*OSH, IMVDA and other submitters*). Some submitters noted that it was appropriate for New Zealand to copy overseas regimes (*NZ Motor Caravan Association, Donald Law*).

There was a lot of discussion about whether or not NO<sub>x</sub> should be tested for petrol vehicles, diesel vehicles or both, as some submitters noted that NO<sub>x</sub> has significant health and environmental effects.

Comments on the petrol test:

- Environment Waikato, Environment Canterbury, MIA and some individual submitters commented that NO<sub>x</sub> should also be included amongst the pollutants measured. Some submitters said if not possible immediately, then in the longer term testing NO<sub>x</sub> would be desirable (*ESP, Endpoint, MTA*).
- Engine Dialysis Equipment NZ Ltd wrote that for petrol vehicles CO, HC and NO<sub>x</sub> could easily be tested on a five-gas analyser.
- George Stock and Company, an equipment supplier, wrote that CO<sub>2</sub> and oxygen levels should be included in the petrol vehicle test with a Lambda calculation to monitor perfect combustion, ensuring the engine management system is correct.
- VSF wrote that the two-gas regime discussed in the discussion document (carbon monoxide and hydrocarbons) was outdated and that four-gas analysis was preferable.
- Two submitters wanted checks for engines that burn oil (*Raychel Smith, Claude Lechwenz*).

Comments on the diesel test:

- Some submitters thought NO<sub>x</sub> requirements should be considered for diesel vehicles (*MfE, Greater Wellington, BP, Environment Canterbury and other submitters*).

## Question 5: Should the performance limits for newly-imported used vehicles be more stringent than the limits for vehicles that are in service?

Sixty-nine submissions were received on this question. The response was relatively evenly split between those who supported more stringent limits and those who did not.

Twenty-eight submitters agreed that performance limits for newly-imported used vehicles should be more stringent than the limits for vehicles that are in service (*EMA, Environment Waikato, Ministry of Health and other submitters*). Some submitters felt that there was an opportunity to stop “junk” vehicles coming into New Zealand (*Bevan Woodward and other submitters*).

Twenty-three submitters preferred performance limits for newly imported vehicles to be the same as for those vehicles in service (*MTA, VINZ, IMVDA, Martin Scott and other submitters*).

Six submitters said that vehicles should have to meet the standards specified by manufacturers (*Low Volume Vehicle Technical Association and other submitters*). The ARC submitted that used imported vehicles should be rigorously tested before leaving their country of origin.

## Question 6: Do you see any practical difficulties in implementing different performance limits for vehicles in different bands? How could these be overcome?

Fifty-three submissions were received in response to this question. The responses were fairly evenly split on whether submitters thought there would be difficulties or not.

Fifteen submitters did not see any practical difficulties in implementing different performance limits for vehicles in different bands (*Environment Waikato, BRONZ Auckland/International and other submitters*). In some cases this view was on the proviso that the regime be kept simple (*Federation of Motoring Clubs, BOP Regional Council, Vintage Car Club*). Greater Wellington Regional Council saw no major obstacles provided that performance limits were clear; the vehicle category bands were distinct; and the vehicle inspectors appropriately trained. The IMVDA and VSF said there should be no problems as long as engine model codes were used for banding. An individual submitter wrote that the difficulty would lie in setting the bands, rather than applying them (*Brian Anthony McSwigan*).

Most submitters identifying difficulties commented that these would arise from identifying which band a vehicle belonged to, given the large range of vehicles in the New Zealand fleet (*MTA, ARC, BP*). Identifying the applicable band and performance limit would need to be easy for the owner, vehicle inspector, repairer, and roadside compliance officer (*VTNZ*). Vehicles that had been tampered with or modified could contribute to implementation problems (*George Stock and Co, Public Health South*).

Suggestions on how these difficulties could be overcome included:

- training
- a computer programme
- a database
- tables
- a book for inspectors
- clear guidance
- a windscreen label to identify the vehicle band

## Question 7: What is the best approach to ensure continuing improvement in the performance of the New Zealand fleet?

Sixty-three submitters provided suggestions in response to this question. Overall, submitters seemed to favour measures that were gradual, such as decreasing acceptable emissions levels or implementing robust limits for new and used imported vehicles. Many submitters noted that a combination of measures was the best way to improve the performance of the fleet.

Seventeen submitters believed that gradually decreasing the acceptable emissions levels for vehicles was the best option to ensure continuing improvement in the New Zealand fleet. This was the most popular of the approaches suggested (*Waitakere City Council, ESP and other submitters*). It should be noted that no industry organisations suggested this approach.

Thirteen submitters said that the best way to improve the performance of the New Zealand fleet was to improve New Zealand's fuel specifications (*NZ Motor Caravan Association, IMVDA, Consumers Institute and other submitters*).

Thirteen others said that public education would be one of the best ways to encourage improvements (*IMVDA, MTA, ARC, Environment Waikato and other submitters*). Related to this, several submitters said that ensuring the fleet has regular maintenance would achieve improvements (*BOP Regional Council, BP and other submitters*).

Linking back to Question 5 (Should limits at the border for imported used vehicles be more strict than for vehicles in service?), eleven submitters said that setting stricter emission limits for imported vehicles was the best way to improve overall fleet performance (*MIA, Public Health South and other submitters*).

Eight submitters said that encouraging the up-take of hybrid, latest technology and alternatively fuelled vehicles, perhaps through offering incentives, would be the best approach (*BP, Public Health South and other submitters*). Incentives could also be offered to encourage the removal of polluting vehicles from the fleet.

Other suggestions included the endorsement of roadside enforcement, banning the removal of catalytic converters, better urban design and roadways encouraging walking, better public transport, and a higher tax on polluting vehicles to discourage their use.

Some submitters noted that improvements in fleet performance would occur, even if no additional action is taken, as new vehicle technologies are developed and older vehicles gradually retire from the fleet (*NZ Citroen Car Club, Vintage Car Club*).



## Question 8: What is the best longer-term approach for improving the performance of diesel engines, particularly with respect to particulate emissions?

Fifty-nine submitters responded to this question. The most common suggestions included:

- Improving diesel fuel specifications. Almost half of the submitters made this suggestion (*OSH, NZ Citroen Car Club, MTA, VTNZ and other submitters*).
- Encouraging the uptake of new technology diesel vehicles, including Euro 4 vehicles (*Ministry of Health, MTA*). ESP noted that long-term performance improvements rest with manufacturers and designers.
- Public education, including education targeted at fleet managers (*IMVDA, Clean Air Auckland and other submitters*). ESP suggested there could be a recognition or award programme for companies with clean fleets.
- Encouraging regular maintenance (*Road Safety West Coast, Roding NZ, Environment Canterbury and other submitters*), perhaps by requiring a maintenance record as part of the WoF (*Environment Canterbury*).
- Discouraging the use of diesel vehicles through a taxation regime, increasing the price of diesel, or increasing Road User Charges (*Clean Air Auckland, IPENZ, Endpoint and other submitters*).

Other suggestions included:

- Introducing retrofit programmes (particulate traps, oxidation catalysts) (*EMA, Public Health South, ARC and other submitters*). The RTF did not support the mandatory use of after-market particulate traps.
- Training for vehicle repairers to ensure the causes of motor vehicle emissions are understood and can be diagnosed and repaired; work with the industry to establish guidelines for repairs (*Association of Australian Diesel Specialists*).
- Have regular emissions testing, including on-road enforcement (*Ministry of Health and other submitters*); test to the manufacturer's performance limits (*George Stock and Co*); introduce chassis dynamometer testing for diesel vehicles; and set emissions limits for NO<sub>x</sub> (*ARC*).
- Make it a requirement that diesel fuel injection equipment must be set to manufacturer's specifications (*Association of Australian Diesel Specialists*).
- Make better use of rail and sea transport modes (*John DeBonnaire*).
- Have requirements for the positioning of exhaust pipes on buses and trucks so they extend upwards and not in the direction of pedestrians and car occupants (*Claude Lechwenz*).
- Run a smoky vehicle programme or enforce the 10-second smoky vehicle rule (*Claude Lechwenz, IMVDA*).
- Introduce cleaner alternative fuels such as bio-diesel (*Owen Mulliss, BP*).

## Question 9: Do you agree that the proposed hybrid framework is the most appropriate for New Zealand's situation?

Seventy-three submitters commented on this question. There was overwhelming support for a hybrid screening programme.

Sixty-nine submitters agreed that the proposed hybrid framework is the most appropriate for the New Zealand situation, while two did not.

The two submitters who did not support the proposed hybrid framework were an organisation (Auto Electrical and Mechanical Services) and an individual. They were both in favour of a centralised framework, and made the following points:

- A centralised framework ensures independence of repairers from testing authorities.
- Vehicle owners could have emissions checked at a centralised testing centre up to a month before a WoF inspection.
- Performance review measures do not guarantee that testing would be carried out consistently.

## Question 10: What would be the main issues for testing stations and WoF garages around participating in the proposed in-service emissions screening programme?

Forty-seven submitters commented on this question. The responses were similar to those for Question 2. The main issues noted in submissions were:

- time and cost of training staff
- the cost of emissions screening equipment
- the cost of maintenance (calibration) and repair of emissions screening equipment
- the cost of making alterations to testing premises
- extra work generated by emissions screening (longer queuing time, longer WoF inspections)
- staff shortages and difficulty in recruiting new staff
- the lack of inspectors with emissions testing knowledge
- the lack of inspectors with the ability to diagnose emissions repairs
- criticism from customers stemming from longer, more expensive WoF inspections
- the need for vehicle engines to be warm for emissions screening
- free re-inspection for failed vehicles
- smaller WoF garages leaving the business
- ensuring the quality and consistency of testing.

Question 11: What would be the main issue for Transport Service Delivery Agents (TSDAs) around participating in the proposed entry emissions screening programme?

Thirty-one submitters commented on this question. The responses were similar to those for Questions 2 and 10. The main issues were the capital investment required of TSDAs (related to equipment and premises) and the training of staff. VTNZ commented that the price for inspections would need to increase to recover the additional costs. The RTF noted the variety and complexity of heavy vehicle engines.

## Question 12: How much lead-in time would TSDAs and WoF or CoF garages require to be suitably equipped and trained to participate in the emissions screening programme?

There were 36 submissions on this question. Suggested lead-in times ranged from 1 month to 2 years, with the majority in the range of 12–18 months. The MIA, MTA, IMVDA and VTNZ were of the view that inspection organisations would need between 18 and 24 months.

Some submitters noted that the lead-in time would depend on the availability of testing equipment, qualified trainers to train vehicle inspectors, and standard procedures for inspectors to follow (*NZ Motor Caravan Assn, Donald Law*).

The MTA provided information on the steps that would need to be followed to successfully implement a screening programme, starting with seminars for businesses that might want to be involved in emissions screening.

### Question 13: What difficulties would you anticipate for smaller or geographically isolated garages?

There were 43 submissions in response to this question. Nineteen submitters said that the greatest difficulty these garages would face was the cost of purchasing equipment for emissions testing. Smaller or geographically isolated garages with low volumes of testing could not justify the capital cost. Inspection organisations opting out of emissions screening would lose their WoF and repair business too, and would no longer be commercially viable (*EMA, Federated Farmers, Clean Air Auckland, ESP*).

Federated Farmers noted that the local garage was a key service and focal point in rural communities, and submitted that the ongoing viability of rural garages must not be unduly compromised.

Some sort of government assistance (e.g. a subsidy) was the solution suggested by some submitters (*Auckland Regional Public Health, Endpoint and other submitters*).

The IMVDA suggested that the smaller or geographically isolated garages might have to consider setting up shared facilities with other garages.

Five submitters said that there would be training problems and garages would face significant costs sending staff to courses on how to operate the new testing equipment (*Environment Waikato, Environment Canterbury and other submitters*). The MTA also suggested that these garages would find it difficult to find more skilled labour to carry out the tests. If equipment needed to be sent away for regular servicing and maintenance this would add to the difficulties for smaller and geographically isolated garages.

VTNZ noted that areas without normal road access (e.g. Great Barrier Island, Stewart Island, D'Urville Island) might need to be exempt from emissions screening.

One submitter asked if the screening programme should involve inspection organisations in rural areas where air pollution is not a significant issue. *'Why must we have one-size-fits-all?' (Claude Lehwenz)*.

## Question 14: What would you see as the major issues for garages wishing to outsource the emissions screening test in order to continue providing WoF services?

Thirty-seven submissions were received in response to this question. The MTA and others submitted that inspection organisations not offering emissions screening should not be excluded from providing WoF and repair services. Many submitters noted the potential for garages to lose customers to other garages that act as a 'one-stop shop'.

Thirteen submitters said that garages wishing to outsource emissions screening would lose customers to inspection organisations where an all-in-one or 'one-stop shop' service is offered. It was generally agreed that customers would not want to take their car to one place for an emissions test and then another to complete the rest of a WoF. This could have negative spillover effects for rural communities in particular, as owners might take their vehicles to be tested in bigger towns that offer the full service, and may do more of their everyday business in these bigger towns (*George Stock and Co, ESP, IMVDA, MTA and other submitters*).

Six submitters said that time management between garages and the garage they outsource to would be an issue. By this the submitters meant that there would be increased time in transporting the vehicle between the various inspection organisations and other co-ordination issues (*Hanzlik, NZ Motor Caravan Association and other submitters*).

Five submitters said that in many places, but in particular rural areas, garages may not have the option of outsourcing emissions screening as it would be impractical (*EMA, Roding NZ and other submitters*). VTNZ noted that rechecks would have to be processed by two inspection organisations.

Some submitters commented that outsourcing would mean extra costs, extra time, and be an inconvenience to the vehicle owner (*Road Safety West Coast, George Stock and Co, Australian Diesel Specialists and other submitters*).

## Question 15: Do you believe the simple tests proposed are the most suitable tests for New Zealand's situation?

Seventy-one submissions were received in response to this question. Many submitters said that they would need to see the results of the Pilot Testing Project to make an informed response. The majority of submitters supported the use of the simple tests – although some said simple tests were only good as an initial step.

Forty submitters agreed that the simple tests proposed are the most suitable for New Zealand's situation (*OSH, Consumers Institute, Environment Canterbury, Environment Waikato, Federated Farmers, Federation of Motoring Clubs, IMVDA, MTA and other submitters*). Many submitters noted the lack of suitable alternatives to simple testing, as the cost of purchasing and installing dynamometers would be too great (*NZ Motor Caravan Assn and other submitters*). Simple testing would allow for maximum participation within the vehicle inspection organisations (*ESP*). The need to keep the time and cost to the motorist to a minimum was noted.

Eight of the submitters who supported the use of the simple tests went on to say that it should only be an initial step / test before more rigorous tests could be implemented (*Clean Air Auckland, Public Health South, BOP Regional Council and other submitters*). Respondents commented that simple testing was better than no testing at all, and that simple testing would do in the short term.

Some submitters noted that simple testing is less reliable and limited in scope compared to loaded (dynamometer) testing (*BP, R A Culver and other submitters*). Many submitters recognised that dynamometer testing is more sophisticated (*IPENZ, Environment Canterbury and other submitters*). The RTF noted that an On Board Diagnostic test is becoming common in the United States.

There were suggestions that dynamometer testing facilities should be available either for testing used imported vehicles entering the fleet, or at a select number of centralised inspection organisations. The reasons for this varied among the submitters, but included the ability of loaded testing to provide valuable information; to test vehicles to their original specifications; or provide a back-up if the results from simple testing were appealed.

VTNZ said that “*simple testing is the best frontline method but there needs to be a back-up available on appeal whereby a vehicle failing the simplified test could be checked in more detail*”. The ARC also submitted that vehicles failing the screening test should be offered the opportunity to undergo a full dynamometer test.

The ARC submitted that “*any simple test adopted must be able to demonstrate consistency with emissions trends measured by more sophisticated methods in order for us to have confidence that it adequately and representatively reflects the ‘real world’ emissions encountered in urban environments*”. Other submitters made similar comments including the LVVTA, who wrote that “*the simple tests are only suitable if the results are consistent between testing locations, and if they give a useable correlation with rolling road testing*”.

One submitter said that the simple tests were only appropriate for areas outside Auckland and Christchurch, and that these two centres would instead require more sophisticated tests.



## Question 16: Are there any other practical implications of implementing simple testing that should be considered (including implications for equipment and facilities)?

Thirty-seven submitters raised potential practical implications. Six submitters said that ensuring the engine / oil were at the correct operating temperature at the time of testing would be important, as this could affect the outcome of the simple tests (*George Stock and Co Ltd, Vintage Car Club, MTA and other submitters*).

Several submitters raised issues concerning the physical design of testing stations. Six submitters stated that because of health / OSH issues, testing stations would have to install ventilation systems to remove the fumes that could build up from screening (*IMVDA, VTNZ, MTA and other submitters*). Four submitters said that some testing stations might need to reconfigure their layout or construct new sites to accommodate the screening process (*VINZ, MTA, VTNZ and other submitters*).

Two submitters said that a strict protocol would need to be established to ensure that all testing stations followed the same procedure. In addition, five submitters said that to ensure consistency / quality between testing stations, an audit system would be required (*ARC, Environment Canterbury and other submitters*). Six submitters also believed that it was important to ensure that testing equipment was regularly checked / re-calibrated to ensure the effectiveness of tests (*AECS, TR Register NZ, ARC, Vintage Car Club, MTA and other submitters*). The IMVDA said it was important to ensure that testing stations use quality 'approved' testing equipment.

Further to Questions 11 and 13, five more submitters identified the training of staff to perform the tests as an issue (*ARC, Environment Canterbury and other submitters*).

**Question 17: Do you think new vehicles should be exempt from the screening programme? If yes, at what age should a new vehicle have its first emissions screening check?**

Sixty-seven submissions were received in response to this question. Over half of the submitters believed that new vehicles should not be exempt, while those who supported an exemption (about one-third) suggested an exemption of between two and six years of age, or an exemption based on vehicle kilometres travelled.

The IMVDA, MTA, MIA and RTF all supported exempting new vehicles from emissions screening because they are built to emissions standards and have manufacturer warranties. ESP noted that there was a very low fail rate of new vehicles in overseas jurisdictions. The submitters supporting exemptions believe that new vehicles should be subject to screening at between three and six years from date of manufacture.

Of the submitters who did not support an exemption for new vehicles, often the justification was to simplify the implementation of the emissions screening programme and to avoid confusing the public (*Auckland Regional Public Health, Public Health South, Greater Wellington Regional Council, ARC, Environment Waikato, Bay of Plenty Regional Council, VTNZ and other submitters*).

## Question 18: If new vehicles are exempt from screening tests, what is the best way to ensure new vehicles maintain their emissions performance?

Many submitters reiterated that they did not support exemptions for new vehicles. Sixteen submitters provided comments in response to the question.

Three submitters (*IMVDA, MTA and other submitters*) said that new vehicles often come with some form of warranty to cover their first few years of use (either from the dealer or manufacturer).

Two submitters said that on-road inspection would be the best approach to adopt.

Other suggestions included regular maintenance and public education (*Hanzlik, George Stock and Co Ltd and other submitters*).

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## Question 19: Do you think older vehicles should be exempt from the screening programme? If yes, from what age should older vehicles be exempt and why?

There were 91 submissions in response to this question. Approximately two-thirds of submitters indicated a preference for older vehicles to be exempt from an emissions test. The remaining third indicated a preference that all vehicles be subjected to some form of emissions test.

Both veteran and classic car owners and associated organisations indicated that older vehicles were unlikely to be able to meet any form of stringent emissions test due to engine technology at the time of manufacture (*MG Car Club Auckland and other submitters*). In addition, many submitters wrote that older vehicles should not be subjected to any requirement to retrofit catalytic converters. Most submitters argued for an exemption for older vehicles starting from 20 to 40 years old. One submitter (*Road Safety West Coast*) argued that vehicles manufactured up to 1990 should be exempted from requirements unless they have systems suitable for adjustment to meet the minimum emissions requirements.

Of the 33 submissions that indicated there should be no exemptions, some indicated there should be no exemptions outright (*Environment Canterbury and other submitters*). However, most of the 'no exemption' submissions indicated a preference towards having an emissions rule that was relevant for the age (classic and veteran), technology, and kilometres travelled by the vehicle (*Auckland Regional Public Health, Auckland Regional Council, Greater Wellington Regional Council and other submitters*).

If exemptions were to be made, most submissions agreed that some form of careful definition of the exempted vehicles or limited exemptions (e.g. classic / vintage cars) was required (*Environment Waikato, Greenhouse Policy Coalition and other submitters*). One submitter felt that more information on vehicle emissions characteristics was required before any exemptions could be considered (*VINZ*). A number of submissions discussed the use of insurance as a way of categorising older vehicles for exemption. For example, exemptions could be for cars that are insured as classic or veteran vehicles where they are restricted to a certain number of kilometres per year (2,000–5,000 depending on the policy). One submission also suggested using the Motor Vehicle Register, which recognises an 'old' vehicle through reduced licensing fees.

Other submissions offered a range of mechanisms that could be used to screen older vehicles. Such mechanisms included:

- a visible smoke test (*Low Volume Vehicle Technical Association Inc and other submitters*)
- emissions requirements attached to the vehicle itself, rather than the engine
- testing to be appropriate for the level of efficiency the particular engine was designed for (*MG Car Club Wellington*).

## Question 20: Should any other vehicle types be exempt from the emissions screening programme, and if so, why?

Sixty-nine submissions were received in response to this question. Approximately one-third of these submitters (*ARC, Environment Waikato, Auckland Regional Public Health, IMVDA, MTA and other submitters*) said that no other vehicle types should be exempt from the emissions screening programme. VTNZ said that there should be no exemptions for any vehicles except for those in areas without access to other parts of New Zealand, such as Great Barrier Island.

Suggestions for exempt vehicles included:

- farm equipment such as tractors
- motorcycles and mopeds
- all two-stroke vehicles
- vehicles involved in motor sport
- military vehicles
- road construction vehicles
- forestry vehicles
- hybrid / electric-powered vehicles
- LPG and CNG vehicles
- vehicles owned by pensioners
- any vehicle that does less than 1,000 km per year
- newly manufactured scratch-built vehicles.

## Question 21: Do you think emissions screening should be required at every WoF?

Seventy-seven submissions were made in response to this question. Around half supported emissions screening at every WoF (*OSH, EMA, Consumers Institute, Roaming New Zealand, VTNZ, BOP Regional Council, Ministry of Health and other submitters*).

A smaller number did not support emissions testing at every WoF and offered a range of alternatives based on age, vehicle kilometres travelled, and location in the country.

Fifteen submitters said that emissions screening should be carried out annually: five of the car clubs supported this opinion (*Vintage Car Club and other submitters*). In addition, two submitters said that emissions screening should be either annual or based on mileage (*NZ Citroen Car Club and other submitters*).

The NZ Motor Caravan Association suggested that emissions screening should be carried out once a year but that the vehicle inspector should be able to carry out an emissions test at the six-monthly WoF if they had 'good cause' to suspect there might be a problem.

The IMVDA said that emissions screening should be every two years for vehicles aged between six and 20 years.

The MTA and the MIA suggested the following frequency of emissions screening:

Vehicle age	Test frequency
0–5 years	Exempt
6–10 years	Test every 2 years
11–20 years	Test annually
Over 20 years	Exempt

One submitter suggested that there be two levels of testing: one for those who live in the larger towns and cities, and another for those in rural areas.

## Question 22: Do you think emissions screening should be required at every CoF?

Sixty submissions were received in response to this question. The majority of submitters supported emissions screening at every CoF (*Nelson City Council, ARC, Bay of Plenty Regional Council, OSH, Environment Waikato, VTNZ, Environment Canterbury, Ministry of Health and other submitters*).

Thirteen submitters did not support emissions testing at the same frequency as CoF. Six submitters (*IMVDA, BP and other submitters*) said that emissions screening should be carried out annually.

The MTA believes vehicles up to three years from date of manufacture should be exempt, with annual testing for vehicles four years and older. The MIA suggests vehicles up to five years old should be exempt, with annual testing for vehicles between 10 and 20 years old.

Question 23: Do you agree that newer vehicles should have less frequent emissions screening checks than older vehicles? If yes, at what age should screening start and at what age should it become more frequent?

There were 57 responses to this question. In general, submitters supported allowing newer vehicles to have less regular emissions screening.

Twenty-eight submitters (*AECS, OSH, IMVDA and other submitters*) felt that newer vehicles should have less frequent emissions screening checks than older vehicles, while twelve submitters disagreed (*VTNZ and other submitters*). Many of those who disagreed believed the frequency should be the same for all vehicles because it would be the easiest option to implement (*BOP Regional Council and other submitters*). Another nine submitters said that any emissions screening should be linked with the existing WoF / CoF framework for new and used vehicles (i.e. vehicles under six years old would do their normal WoF / CoF annually and receive an emissions test as well) (*Consumers Institute and other submitters*).

Submitters who supported less frequent emissions screening for newer vehicles suggested that screening should start for these vehicles at between three and six years of age (*Road Safety West Coast and other submitters*).

Some submitters commented that age is not necessarily the best measure of determining when a vehicle should have less frequent emissions screening, and that distance travelled may be preferable (*Edward Hamilton*).



Question 24: Do you think any changes should be made to *Regulation 28* of the *Traffic Regulations 1976*, if this section is transferred into the Land Transport Rule?

There were 42 responses to this question, which were relatively evenly split between those who supported change to *Regulation 28* and those who did not. *Regulation 28*, commonly known as the 10-second 'smoky vehicle rule', does not allow a vehicle of any age to emit excessive exhaust smoke.

Many submitters stated that *Regulation 28* was not being effectively enforced (*MIA, LVVTA and other submitters*). The ARC suggested that enforcement officers should record the details of a smoky vehicle and then report in to a centralised operator. The owners of a smoky vehicle should be required to have an emissions check and have the vehicle serviced rather than being fined.

Four submitters said that *Regulation 28* should be decreased from 10 seconds to between three and five seconds (*IPENZ, Environment Canterbury and other submitters*).

## Question 25: What would you see as the main advantages and limitations of enforcing the emissions performance limits?

Forty-eight submissions were received on this question. Submitters identified a variety of advantages and limitations. The most widely noted advantage was improved air quality.

### Advantages:

- Cleaner air and an improved overall environment was stated as the greatest advantage by 21 submitters (*EMA, MfE and other submitters*).
- Five submitters said that public awareness about vehicle emissions and the need to maintain vehicles would improve (*OSH, MfE, ARC and other submitters*).
- Four submitters said that a cleaner fleet would be a significant advantage (*MTA, Clean Air Auckland and other submitters*).
- The MTA said that a greater awareness of the benefits of a cleaner fleet, financial savings to the nation and individuals, and economic growth supported by a more efficient transport fleet are the advantages to be gained from enforcing emissions limits.

### Limitations:

- There was no real consensus amongst submitters as to the limitations of the screening programme.
- Six submitters said the greatest limitation would be imposing higher costs on vehicle owners (*IMVDA, Auckland Regional Public Health and other submitters*).
- Two submitters mentioned that the test is only valid on the day of the test because the vehicle and driving conditions can change dramatically, affecting the vehicle's emissions performance (*BRONZ Otago and other submitters*).
- The MTA said that "*from a business point of view [they] can foresee the heightened activity of the initial introductory period and a lull in the post settling period as a limiting factor for businesses to accommodate*".
- The ARC said that "*the key limitation of enforcing the limits is that some vehicles may pass the simple WoF emissions screening test but then fail the 10-second rule*".

## Question 26: Do you have any views or opinions about the use of supplementary on-road enforcement options?

There were 64 submissions received in response to this question. In general, the support for on-road enforcement is evenly split. Local authorities tended to support on-road enforcement, but had reservations about where the responsibility lay.

Thirteen submitters did not support any form of supplementary on-road enforcement. Many felt that emissions screening at WoF / CoF would be sufficient and it would be unnecessary to have on-road enforcement as well. Others did not want to see scarce Police resources diverted away from crime to on-road emissions enforcement (*Federated Farmers and other submitters*). The Consumers Institute noted that “*there is already noticeable resistance to the amount of time Police spend on speeding enforcement. Enforcing emissions performance may be met with even more resistance*”. Five submitters believed that the 10-second rule is the only enforcement option required (*MG Car Club and other submitters*).

Seven submitters said that any form of on-road enforcement would be seen by the public as negative and just another ‘revenue-raising tool’ (*EMA and other submitters*). The Federation of Motoring Clubs said that roadside testing was unfair in that often the problem was not visible and motorists would be unaware of the problem (unlike a bald tyre or burnt-out light). Environment Canterbury submitted that random roadside testing and remote sensing would be very limited tools due to technical robustness and scientific certainty.

Eighteen submitters (*VINZ, Greater Wellington Regional Council, Nelson City Council, MIA, Consumers Institute, ARC and Auckland Regional Public Health and other submitters*) supported the use of supplementary on-road enforcement. One submitter said that on-road enforcement should be the main means of enforcing any emissions policy as opposed to using the WoF / CoF framework. Two submitters said that it would discourage vehicle owners from altering their vehicles between inspections as there would be a chance that they would be caught (*Association of Diesel Specialists NZ*).

There was a general concern amongst local authorities about who would conduct supplementary on-road enforcement. Page 20 of the discussion document makes reference to local authorities and the monitoring of emissions. Northland Regional Council asked “*that reference to local government being involved in ... emission testing is removed ... and that qualified law enforcement officers undertake such testing*”. The ARC “*consider(s) any supplementary on-road enforcement to be the responsibility of the Ministry of Transport*”. Local Government NZ shared similar concerns, saying “*it would be a big policy change in the role of territorial authorities from parking enforcement, to take on the role of random roadside emissions testing ... most local authorities are unlikely to want a direct role in monitoring and enforcing vehicle or driver quality standards*”.

Five submitters commented that on-road enforcement would be useful in keeping the public aware and educated about some of the issues surrounding vehicle emissions (*Ministry of Health, BOP Regional Council, ARC and other submitters*).

**Question 27: Do you have any further suggestions on how the introduction of the emissions screening programme could be managed to ensure vehicle owners are prepared for the introduction of emission performance requirements?**

Forty-seven submissions were received on this question. A key theme was that the education campaign should start as soon as possible, and well before any actual enforcement of emissions screening, in order to give vehicle owners extensive notice of the programme.

Nine submitters said that having an introduction period where vehicles can fail an emissions test but still get a WoF / CoF would be useful. It would help educate vehicle owners about emissions screening and what they have to do in the future to pass a test (*IMVDA, VTNZ, ESP and other submitters*).

Six submitters suggested the use of various advertising mediums including television, newspapers, pamphlets, billboards, radio, websites and competitions to raise awareness amongst the general public.

Six submitters suggested that the Ministry of Transport partner with local government and other relevant central government agencies such as the Ministry for the Environment to share ideas and resources to educate the public (*Local Government New Zealand, Greater Wellington Regional Council, ARC, Environment Waikato, Environment Canterbury, Ministry of Health and other submitters*).

Five submitters said that the introduction of emissions screening should focus on the positive health benefits clean air would have for vehicle owners (*Association of Australian Diesel Specialists NZ and other submitters*). Similarly, a few submitters said that conservation / preservation of the environment should be a major theme of the education campaign to help illustrate the usefulness of the programme.

Two submitters said that a government helpline should be set up, so the public can ring for information on the screening programme (*Auckland Regional Public Health and other submitters*).

## Other Comments

Of the 127 submissions received, approximately half had additional comments. Most of the submissions supported emissions screening (*Transit New Zealand, Auckland Regional Council, Federated Farmers, BP and other submitters*), and provided helpful commentary or observations for ongoing policy development. Some submissions discussed:

- differential taxes and levies (*BIKE NZ*)
- renewable limited use licences
- incentives for use of alternative fuels such as bio-diesel and LPG.

Other submissions considered the proposed emissions screening programme did not go far enough (*Cycling Advocates Network, BIKE NZ and other submitters*). These submitters wanted a stronger government response than just targeting the very worst polluters, because they felt that the health and environmental impacts of vehicle emissions were significant.

One submitter said there was little need to do anything as reductions in emissions from the vehicle fleet would occur through time by natural attrition, and that the proposed programme was “timid and expensive”. Other submissions questioned the expense of the programme versus the likely benefits, and suggested additional work was required in this area (*AA, Federated Farmers, MTA and other submitters*). It was also suggested that more realistic introduction dates needed to be considered.

Some submitters also used the opportunity to raise other non discussion document-related environmental issues, such as:

- noise
- the need to consider walking and cycling
- improvement of New Zealand’s clean, green image in respect to the tourism industry
- the need to consider the workability of the current WoF testing system (*Vehicle Service Federation*)
- training and equipment associated with the implementation of the screening programme needed to be funded by central government (*Taranaki Regional Council*)
- alternative mechanisms for reducing emissions and CO<sub>2</sub>
- the importance of undertaking a social impact assessment (*Waikato Regional Council, Local Government NZ and other submitters*).

Other submissions discussed the need to use the current emissions reduction tools more effectively. These included greater enforcement of the 10-second smoky rule (*Clean Air Auckland, Auckland Regional Council*) and Rule 33001, if backed by full or sample border testing. Rule 33001 put in place a vehicle emissions standards regime for motor vehicles to ensure that all entrants to the New Zealand vehicle fleet are manufactured to approved international exhaust emission standards.

One submitter also believed the screening programme should undertake an environmental impact assessment (*Transit NZ*).