

**AA Submission: Vehicle Exhaust Emissions Rule
(9 Jul 2007)**

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Exhaust Emissions Rule
Rules Team
Land Transport New Zealand
PO Box 2840
WELLINGTON

Dear Sir/Madam

VEHICLE EXHAUST EMISSIONS (Rule 33001/2)

Introduction

The New Zealand Automobile Association (NZAA) welcomes the opportunity to provide comment on the draft Vehicle Exhaust Emissions Rule (2007).

As an organisation with a membership exceeding 1.2 million vehicle owners in New Zealand, close attention is given to any proposals that apply to vehicle standards.

We circulated the draft Rule for comment to our 17 District Councils. The AA District Councils are representative of the membership and deal with policy issues. A summary of the feedback from our District Councils is provided below. We hope that you find these helpful in finalising the Rule, and welcome the opportunity for further input.

Overview

The NZAA is supportive of a standards-based approach governing the import of new and used vehicles, be they based on emissions or safety levels, such as in the Frontal Impact Rule. We consider it is appropriate that all vehicles entering the fleet for use on the road should be manufactured to a minimum emissions standard; that used vehicles be tested to ensure they still perform to a minimum standard; and that such standards be updated over time so that the emissions profile (along with efficiency and safety) of the fleet improves.

While we consider that improving the emissions profile of the fleet will contribute to improved environmental and health outcomes, we do not support setting policy on the basis of the claimed 399 premature deaths each year attributed to vehicle emissions.¹ It is the AA's opinion that this figure was a poor estimate at best, and further that the majority of exposure to microscopic particles are attributed to PM₁₀ from diesel engines (91% according to the Auckland Regional Council website) – and at the time of the NIWA report sulphur content in diesel was 3000ppm compared to 50ppm today – yet diesels represent just 14% of the vehicle fleet. Thus it is optimistic to expect any policy interventions that inevitably will mostly affect imported used petrol vehicles to “reduce pollution and achieve improvements in NZ air quality” by any measurable degree, as the proposed policy states, unless it is supported by in-service standards or incentives to dispose of older vehicles, particularly diesels (and especially commercials). That said, the AA is not opposed to the adoption of minimum emissions standards per se.

¹ *Health Effects due to Motor Vehicle Air Pollution*, NIWA, January 2002, p. i

However, we are very concerned that the timing for adopting the standards (the 'lag' period from their implementation in overseas jurisdictions, i.e. Japan in the case of used-imports) needs to be ordered in such a way to achieve the Government's objectives while minimising adverse effects. It is our view that the adoption of later Japanese standards (Japan 05 and 09) in 2010 and 2013 respectively will have significant negative consequences on the supply of used-imports into NZ, and related impacts on the used vehicle trade (to the extent of virtually eliminating the industry), such that the Rule will perversely *increase* emissions, by motorists deferring replacing their existing vehicles (due to lack of supply and higher purchase costs). The NZAA proposes that the lag period for these two standards be extended to 8 years each, increasing the available supply of vehicles in the year of implementation, reducing costs to consumers, and providing greater certainty to the industry regarding market volumes. Nevertheless, we support the adoption of the initial Japan 00/02 petrol and 02/04 diesel standards, but propose deferring the date the Rule comes into force until 1 January 2009, to give the industry more time to prepare and increase the pool of eligible vehicles.

Comments on the proposals

Proposal 1: Update the existing emissions standards for new vehicles imported into NZ

We support the adoption of the standards for *light vehicles* as proposed in Tables 2.2 and 2.4, along with the ultimate reduction in the lag period for introducing new standards to two years for all vehicles in future. We concur with the overview that this is unlikely to impose any additional costs on manufacturers, distributors or consumers because virtually all new vehicles sold in NZ comply with these standards. However, this lag period should relate to the date the international standards became mandatory for all models ('new' and 'existing') and not the date the standards were first applied to new-models only.

That being the case, there is no need for a one-year delay in adopting the relevant standards for 'existing-model' new vehicles for the reasons outlined in page 13 of the overview (which we otherwise support) because in effect such vehicles will have a lag of up to two years.

The NZAA also supports the adoption of ADR 79/02 in 1 January 2009 for new-model light petrol vehicles, despite the one-year delay compared to the adoption of the equivalent Euro 4. We don't consider the two dates should be reconciled – nor is it reasonable to adopt ADR 79/02 *sooner* than in Australia. On that point, we understand that ADR 79/02 does not come into effect until *July* 2010 for existing-models, which means the proposal in Table 2.2 to adopt this in January 2010 should be deferred for at least six months and perhaps until January 2011.

In the absence of a comparable ADR standard with Euro 5, we support adopting Euro 5 for all vehicles as proposed in the tables, however this may need to be reviewed in a subsequent update of the Rule if the timing of the ADRs differ.

Proposal 2: Clarify that vehicles must be fitted with on-board diagnostic equipment if required by the standard

We have no opposition to this revision.

Proposal 3: Enable the NZ Defence Force to import non-compliant vehicles

We accept the arguments put forward in favour of this proposal, although such non-compliant vehicles should not have the emissions equipment removed, but rather the ability to override them when required as described in the overview.

Proposal 4: Require minimum emissions standards for used imported petrol and diesel vehicles

The NZAA is very concerned with the proposed dates for adopting the emissions standards for used imports specified in Tables 2.1 and 2.3 of the draft Rule. It is our considered opinion that the ever-decreasing number of years' lag from the implementation of the standard(s), specifically Japanese, will have a massive adverse effect on the volume of used imports available for sale in NZ, such that it will ultimately lead to an *increase* in emissions, contrary to the objectives of the Rule.

We draw this conclusion because of the following effects we believe will result from the timing of the adoption of minimum standards as proposed:

- a reduction in the volume of used imports by at least half in the first year of the Rule [2008] (estimates vary, but Covec estimates 45% of used petrol imports, and 95% of light diesel and 86% of heavy diesels will be prohibited in the first year², off a base of approximately 120,000 petrol, 16,000 light diesel and 12,000 heavy diesel imports in 2006);
- an increase in the retail price of used imports on the basis the average age will be younger than at present (approximately 8 years for petrol vehicles and 9-10 years for diesels);
- a reduction in the number of importers and retailers and associated reduction in competition;
- a possible increase in the cost of complying and transporting vehicles if the number and location of compliance agents becomes more concentrated as a result;
- a reduction in the total volume of vehicles being traded each year due to the lower number of imports and increased prices;
- the likelihood consumers will retain their existing vehicles for longer (thereby reducing the rate of disposal of 'end of life' vehicles and increasing the average age of the fleet) due to the reduced supply and higher prices of used imports; only trading in when average prices reach an acceptable level, i.e. an older or higher-mileage vehicle.

These impacts will be more pronounced for used diesels, especially heavy commercials, and will almost certainly result in the existing commercial fleet remaining in service for longer and not being replaced by newer imports. The impacts will be further exacerbated with the adoption of newer standards in 2010 and 2013, due to even greater reductions in the volume of eligible imports of all variants.

Further, we agree with Covec in their report to the Ministry of Transport that "any policy that prolongs the life of vehicles about to be scrapped will have adverse effects. This is precisely the finding of this report."³ Indeed we consider scenario 2 in the report, namely that emissions may *increase* by up to 2.5% if "at-risk" consumers retain their existing vehicle, is more likely than scenario 1, that emissions may *reduce* by 0.5%.⁴ In other words, the potential fuel and emissions savings are more than outweighed by a greater likelihood of increases. Furthermore, a 0.5% reduction in emissions is a very small objective considering the negative economic impacts it will have on the trade, and the higher vehicle costs it will impose on thousands of New Zealanders.

That 0.5% reduction in emissions is more likely to be achieved by encouraging the turnover of the existing fleet by maintaining the availability of newer low-priced imports, or initiatives to target the dirtiest vehicles in the fleet e.g. stricter in-service testing for diesel commercials in metropolitan areas (especially Auckland).

Another negative consequence is that there will likely be a reduction in the average weighted fuel economy of all imports, as the sheer volume of used light Japanese vehicles has been

² *Socio-economic impacts of emissions standards on used imported vehicles*, Covec, November 2006, p. 14

^{3,4} *Socio-economic impacts of emissions standards on used imported vehicles*, Covec, November 2006, p. v

contributing to a fall in average economy, offsetting new light vehicles which tend to be larger and heavier, as well as replacing older, less efficient vehicles in the fleet. Under this proposal, a greater proportion of annual imports will be new vehicles, leading to increased average fuel consumption and higher emissions, compounded by the fact that older vehicles will remain in the fleet for longer.

Accordingly, the NZAA proposes that the timing of implementing the Rule, and the dates for adopting the standards, be adjusted to minimise these impacts whilst still contributing to improving the emissions profile of the NZ fleet. We propose that LTNZ revise the Rule to:

- postpone the implementation of the first phase until 1 January **2009**;
- adopt the Japan 05 standard (and Euro 4, US 2004 etc.) in **2013**;
- adopt the Japan 09 standard (and Euro 5, US 2008 etc.) in **2017**;
- consider introducing a maximum certified mileage which imports cannot exceed, so vehicles nearing the end of their useful life are not dumped in NZ.

This will have the effect of increasing the pool of eligible vehicles, and reducing their average prices as a result of a slightly higher average age, thereby reducing the negative consequences described above. And yet all imports will still be built to the same standards, except that the lag period from their adoption in country of manufacture has been extended (i.e. to 8 years for subsequent Japanese standards). The emissions profile of the fleet will still improve, as older vehicles, built to an earlier standard and possibly no longer maintained to it, will be replaced by imports which are. Indeed this is a more likely outcome than under the current proposal which would lead to a decline in fleet upgrading.

To encourage the replacement of older vehicles in the fleet with those newer imports, we would endorse the extension of trial vehicle scrappage schemes. These could be funded from a modest levy applied to every used import at the time of compliance, meaning the last owner is guaranteed a minimum payment if disposing of the vehicle correctly (which can be applied to offset any disposal costs that may apply).

Additionally, extending the lag period to a minimum of 8 years will provide greater long-term sustainability for the used-import industry, in that supply volumes will be relatively constant rather than reducing radically in years 2010 and 2013 as the Rule currently proposes, meaning businesses will be better able to manage employment resources and infrastructure, with flow-on benefits to consumers by maintaining competition levels.

Proposal 5: Undertake an emissions test on used vehicles at entry to the vehicle fleet

The NZAA is supportive of this proposal. Sample testing undertaken in Japan by the NZAA and JEVIC in conjunction with the MoT during 2006 showed a significant number of diesel vehicles in particular failed the Japanese test. Permitting the import of such vehicles which otherwise comply with the relevant standards would do nothing to improve the emissions profile of the NZ fleet, so it is appropriate they be objectively tested. While the sample testing also demonstrated that the majority of petrol vehicles passed the test, we consider that the relatively low cost of the test (even if greater than the \$25-30 per vehicle estimated) is a small price for all vehicles to pay in order that non-compliant ones are screened out. Further, the test does not prohibit the importation of those vehicles per se, but identifies them to be repaired to standard if desired by the importer.

We endorse the proposal that used-imports be tested according to the Japanese in-service emissions test and test limits, even if a small minority are not sourced from Japan.

The NZAA takes no view on whether these tests should be conducted in Japan, or upon arrival in NZ, as this is ultimately at the discretion of the importer, however documentation should be

produced to demonstrate they have been tested to the Japanese procedure using appropriate equipment.

We also agree that vehicles manufactured before 1990 should be exempted from the requirement to undergo the metered test on the grounds they were not manufactured to a particular emissions standard. Likewise, post-1990 de-registered vehicles already in NZ should not be required to undergo the test in order to re-enter the fleet, although some sort of documentation may be required to prove the vehicle arrived in NZ prior to the implementation of the Rule. They should however be expected to pass the visible smoke check at WoF.

Similarly, we endorse exempting post-1990 'unique collectible' vehicles and motorsport vehicles from complying with the Rule as they are usually driven infrequently, however we oppose exempting 'immigrants' vehicles for the same reasons outlined in our submission on the Frontal Impact Amendment (Rule 32006/3). That is, as such vehicles are likely to be used regularly, they should comply with the same standards as other used imports.

Proposal 6: Prohibit the removal of, or tampering with, a vehicle's emissions control equipment

We agree with this proposal. Removing emissions control equipment compromises emissions levels, and is contrary to the manufacturers' operating specifications, therefore it is appropriate to impose a ban in the event maintaining such equipment becomes part of an in-service test. As outlined in the overview, the prohibition should not be retrospective, but only applied to new or used imports from the date of implementation of the Rule, and be administered via a simple inspection at the time of entry certification.

In the event an exhaust is modified, and the modification is questioned by an inspector at the WoF or CoF, then it is appropriate that the exhaust be tested for compliance according to the same Japanese in-service emissions test. However, as the availability of such testing equipment is likely to be limited to main ports, we are concerned that vehicles may be referred to this test in error (i.e. are not modified, or the modification is compliant), at some inconvenience to the owner, and at a greater cost than the \$35–\$50 estimated if some distance is involved. This could be partially resolved by placing onus on the installer or exhaust manufacturer to ensure the system is compliant, and producing documentation to that effect.

Conclusion

In summary, the NZAA is supportive of many of the proposals in the draft Rule, including the adoption of minimum emissions standards for all used imports. We support the adoption of the proposed standards, however we have grave concerns about the timing (lag) for adopting those standards.

As currently drafted, the Rule will reduce the volume of eligible used imports by at least half in 2008, with far greater reductions in 2010 and 2013. It is our strong view that this will have an adverse impact on the used car industry by reducing supply and raising average retail prices, with the flow-on effect that thousands of motorists will be unable to afford to upgrade their vehicles, thereby failing to achieve the Rule's objective of contributing to a reduction in vehicle emissions. Indeed, we believe the Rule will have the opposite effect.

In short, we propose that the dates for adopting the initial Japanese standards should be deferred one year until January 2009, and the adoption of the subsequent '05' and '09' standards should lag Japan by eight years each. This will ensure a greater supply of compliant used imports is available at affordable prices to replace older vehicles at the end of their useful life, while also maintaining the viability of the used-import industry.

Yours sincerely

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New Zealand Automobile Association