

Regulatory Impact Statement: Vehicle Exhaust Emissions Rule [2007]

Executive Summary

The Land Transport Rule: Vehicle Exhaust Emissions Rule 2007 (the draft Rule) will achieve the objective of setting minimum exhaust emission standards for all vehicles imported into New Zealand. It will also ensure that used vehicles entering the country continue to meet the emission standards they were manufactured to.

New Zealand currently applies minimum exhaust emission standards for new vehicles manufactured after 2004, but the draft Rule will update these with more stringent standards subsequently introduced in other jurisdictions. There are currently no specified minimum exhaust emissions standards for pre 2004 used vehicles. There is also no requirement for vehicles to prove that they continue to meet the emission standards they were manufactured to.

Significant health costs are also associated with harmful vehicle emissions. The Health and Air Pollution in New Zealand: Final Report (HAPINZ) released in June 2007 valued the health costs of vehicle emissions at almost \$500 million per annum.

Applying minimum exhaust emission standards to both used petrol and used diesel vehicles entering New Zealand is the preferred policy option. After consultation, it was discovered that the timing of the standards as consulted for used petrol vehicles may be more restrictive than intended. At its worst, this could halt fleet turnover and cause people to hold on to their existing vehicles for longer than would otherwise be the case, potentially leading to lack of improvement in local air quality. For this reason, the standards for petrol vehicles have been delayed years from the timing proposed in consultation.

Because the used diesel vehicles entering the fleet do not generally produce less harmful emissions than the vehicles they are replacing, fleet turnover is a less significant factor and imposing any minimum exhaust emission standards for used diesel vehicles will improve air quality. Because of the relatively high age of diesel vehicles currently being imported, a possible effect of the draft Rule is that up to 93% of current older and higher-emitting diesel vehicles would not be able to enter the fleet in 2008.

For used petrol vehicles, major emissions benefits will be provided in the longer term (10-20 years) as more compliant vehicles become available and enter the fleet. There may, however, be little short term (next ten years) benefit of implementing the draft Rule if it significantly reduces the rate of fleet turnover.

Implementation of the Rule is planned for 1 January 2008 or 28 days after the Rule is gazetted, whichever is the latter.

Adequacy Statement

The RIAU has reviewed the Regulatory Impact Statement and considers it adequate according to the adequacy criteria. The RIAU notes however the uncertainties associated with balancing long term benefits and short term costs, including potential costs on certain sectors.

Status Quo and Problem

The existing Land Transport Rule: Vehicle Exhaust Emissions 2006 (the 2006 Rule) requires all vehicles entering the country manufactured after 1989 to meet an approved emissions standard from one of four recognised jurisdictions at the time of manufacture. Although this includes compliance with specific standards for vehicles manufactured from 2004, no explicit minimum standards are specified for the vast majority of used vehicles that continue to be manufactured before 2004. The 2006 Rule also does not require vehicles to physically demonstrate at the time of certification for entry into the fleet that they continued to meet the emissions standards to which they were built.

In January 2007 Cabinet agreement was sought to develop a draft Rule to revise and replace the 2006 Rule, to include minimum emissions standards for imported used vehicles and to test that used vehicles continued to meet these standards upon entry [CAB Min (07) 2/2 refers]. The Land Transport Rule: Vehicle Exhaust Emissions Rule 2007 (the draft Rule) also proposes several relatively minor changes including the specification of more recent emission standards applicable for new vehicles imported into New Zealand.

Diesel vehicles have been found to contribute disproportionately to air quality problems through the production of high levels of very fine particulate matter (PM₁₀). Particulate matter contributes 91% of the affects of vehicle pollution in the Auckland area.

The Health and Air Pollution in New Zealand: Final Report (HAPINZ) released in June 2007, based on 2001 data, estimated that 500 people per year die prematurely as a result of harmful exhaust emissions from vehicles. Of which, 414 were attributable to PM₁₀ particulates from diesels. Although petrol vehicles produce significantly less harmful particulates, and therefore less air pollution, they produce carbon monoxide (CO), oxides of nitrogen (NO_x), sulphur dioxide (SO₂), hydrocarbons (HC), ozone and benzene. These chemicals have a severe impact on public health and are also the main cause of restricted activity days. The HAPINZ study put the health costs of vehicle emissions at almost \$500 million per annum.

Since 2000, the average age of vehicles entering the fleet has continued to increase. Without government intervention air quality problems caused by vehicle emissions are projected to worsen. In the absence of a legal requirement there is little incentive for importers to bring in newer vehicles built to more stringent emissions standards. Minimum exhaust emissions standards are preferred to other initiatives such as

differential pricing or tax incentive mechanisms. This is because they will achieve the absolute adherence of all vehicles at time of entry into New Zealand.

In 2000, the average age of an imported diesel-powered heavy vehicle (trucks and buses) was 8.3 years. In 2006, this had increased to 10.4 years and is expected to continue increasing. During the same time period, the average age of imported light diesels (<3.5t tonnes) has also increased from 9.3 years to 10.7 years. This means that, on average, New Zealand is importing diesel vehicles built in 1996. These vehicles were built to an exhaust emissions standard that allowed PM₁₀ emissions to be ten times higher and NO_x levels to be more than twice those allowed under the manufacturing standard currently in force under the Japan 2005 standard or equivalent. (As between 95% and 97% of all used vehicles entering are imported from Japan, this document specifically states Japanese exhaust emissions standards but the draft Rule will contain standards from all of the four recognised jurisdictions.) This tenfold difference in particulate emissions (PM₁₀) is based on manufactured standards and does not take into account further deterioration that may occur due to wear and tear and lack of maintenance.

Used petrol imports tell a similar story. The average age of a used petrol import has risen from 7.1 years in 2000 to 8.1 years in 2006. Japanese manufacturers have built vehicles to increasingly more stringent standards, yet the majority of the used petrol vehicles imported were built before 2000.

One of the main reasons for the increasing age of used vehicles into New Zealand has been the increased international competition for Japanese used vehicles, particularly from Russia. This supply constriction has raised prices and forced New Zealand importers to purchase older and therefore cheaper vehicles. An ageing import profile will further delay the importation of vehicles meeting modern emission standards.

Replacing vehicles with similar aged or older vehicles will not improve air quality, especially from diesel vehicles. Specifying minimum emission standards for vehicles entering the fleet is viewed as the most appropriate way to break this cycle.

The draft Rule is part of a larger transport work programme with high level objectives, including greenhouse gas reduction and improving air quality. Although considerable benefits are expected in the longer term (10 to 20 years), it is not expected that the introduction of a Rule to require minimum emissions standards for vehicles entering the country will on its own provide improvements in air quality in the short term (next ten years).

Vehicle kilometres travelled (VKT) will have an important impact on any measure designed to reduce emissions. A consultant firm, Covec, was commissioned by the Ministry of Transport to model the likely impact of the draft Rule on air quality (The Update and Extension of Vehicle Emissions Modelling report (the Covec report)). The Covec report only modelled potential effects on emissions to 2016. This document generically describes this ten year time period as the "short term". The longer term of 10 to 20 years is used as an additional time measure that takes into account an entire cycle of fleet turnover.

The Covec report found that one of the likely effects of introducing more stringent emissions standards is a supply constraint that reduces fleet turnover and which leads to people retaining their current vehicles for a few additional years. If a vehicle built to a lower emission standard is driven further rather than replaced, emissions reductions may take longer to be achieved.

Thus, the draft Rule must be complemented by additional policies to prevent an increase in VKT, or to otherwise reduce emissions from the vehicles already in the fleet. Imposing more stringent emissions standard on vehicles entering the fleet is proposed as the necessary first step to reducing emissions.

Objectives

The public policy objective of the draft Rule is to provide for improved emission standards on vehicles entering the New Zealand Fleet.

Achieving this objective is expected to contribute to the wider government objectives including:

- meeting National Environmental Standards for Air Quality set under the Resource Management Act 1991;
- the New Zealand Transport Strategy's goals of protecting and promoting public health and ensuring environmental sustainability; and
- the objectives of the National Energy Efficiency and Conservation Strategy, Sustainable Development Programme of Action and the Climate Change Programme.

Options

The draft Rule deals with both new and used and petrol and diesel vehicles. New and used vehicles can essentially be viewed as separate industries.

New Vehicles

The 2006 Rule already requires new vehicles entering the country to have been built to an approved emissions standard appropriate to the vehicle's year of manufacture. The draft Rule specifies more stringent standards that have been introduced in other jurisdictions since the original Land Transport Rule: Vehicle Emissions was introduced in 2003.

It is proposed that the Japan 05 standard (and other equivalents) be introduced with a two-year lag time to ensure that there are no supply disruptions for those manufacturers and importers that tailor their vehicles for the New Zealand market. This should ensure there will not be any significant cost implications from the introduction of the proposed standards for new vehicles over the costs manufacturers and importers would otherwise face. However, it has been recognised from consultation that least disruption will actually occur if Australian Design Rules (ADR) standards are implemented on the same day as Australia.

Used Vehicles

The 2006 Rule only applies to any used vehicle manufactured on or after 1 January 2004 that enters the fleet. Imposing minimum emissions standards for used vehicles may have a significant short-term economic impact on some sectors. Accordingly, several different implementation options have been analysed.

Option 1: Applying the same standards for new and for used vehicles entering the fleet

This option requires all vehicles entering the fleet to meet the same Japan 05 or equivalent exhaust emission standard as new vehicles.

This policy would severely restrict the quantity of used vehicles that could enter the country. All but the most recently built vehicles would be excluded and it would essentially end the trade in importing used vehicles.

The likely effect of such a significant restriction on the volume of used vehicle imports would be a significant delay in achieving improved air quality. This would significantly reduce fleet turnover, as older vehicles built to a less stringent standard would stay in the fleet longer.

Modelling also showed that used vehicles travel less distance, on average, than new vehicles and also exit the fleet sooner than vehicles imported new. This suggests that it is appropriate to require new vehicles to meet higher standards than used vehicles. This is because they will travel greater distances and are likely to contribute more to total emissions over their entire lifetime than a vehicle that is imported used.

Some models and styles of vehicles are sold in significantly greater numbers used than new. An example of this would be “people movers” that are popular with families and make up a tiny fraction of new vehicle sales, but a significant segment of the used vehicle market. In 2006, for example, 236 Honda Odysseys were sold new compared to 3325 used that entered the fleet. People purchasing from these niche used vehicle markets would suffer restricted choices.

Applying new vehicle emission standards to post 1989 used vehicles would be expected to achieve the Government’s objective of providing emission standards for vehicles entering the fleet. Unfortunately, because of the expected reduction in fleet turnover rates this would not achieve quickly enough the long-term objectives of improving air quality over the next 10 to 20 years. This option is therefore not recommended.

Option 2: Set minimum emission standards for used diesel vehicles only

Cabinet has previously agreed that it is appropriate to place greater restrictions on the entry of diesel vehicles into New Zealand compared to petrol vehicles [CAB Min (07) 2/2 refers]. Accordingly, the draft Rule proposes to implement the Japan 02/04 standard for diesel vehicles from 1 January 2008 and the Japan 2005 standard on 1 January 2010.

Although diesel vehicles contribute to the majority of harmful vehicle emissions, petrol vehicles also make a measurable contribution to air quality and to health costs associated with poor air quality. The 2007 HAPINZ study found that petrol vehicles were responsible for around 20% of the premature fatalities associated with transport emissions (although it should be noted they make up 80% of the vehicle fleet). The HAPINZ report also identified that many of the non-fatal medical conditions associated with air pollution were directly associated with carbon monoxide emissions from petrol vehicles. It is therefore important that petrol vehicles are also regulated to ensure that emissions decline.

Although not the primary purpose of the Rule, failure to regulate used-petrol vehicles would also delay the introduction of other advanced features that are now common on modern vehicles, such as improved safety features and greater fuel economy.

Applying minimum vehicle emissions standards only to diesel vehicles is expected to make improvements to some aspects of air quality (Covec modelled a 2.5% reduction in opacity, the emissions test for PM₁₀, by 2016), but cannot address a significant part of the air quality and induced health problems associated with petrol vehicles.

This option is therefore not recommended.

Option 3: Apply minimum emission standards for both petrol and diesel used vehicles with emissions testing (Preferred Option)

The preferred option is to set minimum exhaust emissions standards for all used diesel vehicles. The standards in the draft Rule distributed for consultation reflected the dates agreed by Cabinet in its decision of February 2007. Consultation identified that the effects of the draft Rule both on air quality and on importers would be quite different for petrol and for diesel vehicles. These are therefore discussed separately.

The remaining component of the preferred option is a requirement for used vehicles, both petrol and diesel, to undertake and pass an approved emission test. This is necessary to ensure that used vehicles still meet the emission standards that they were built to. The costs of an emissions test on each vehicle have been estimated to be between NZ\$25 to NZ\$50 independent of whether carried out in New Zealand or in Japan. At present it costs approximately \$600 to certify and fully register a vehicle for use on the New Zealand road for the first time. Therefore, the additional cost for an emissions test would not be significant in that context, especially as the final sale price of a used imported vehicle is likely to be many thousands of dollars.

Testing bodies would potentially face a number of one-off costs associated with implementation of the tests. They would need to purchase testing equipment. The price of the equipment is expected to be between \$2000 and \$5000. Testing bodies would also have to carry out appropriate training of the testers. This is likely to take less than half a day for each tester. Testing sites may also have to install appropriate occupational safety and health related equipment to deal with any excess harmful emissions generated during the testing procedures. These costs will vary greatly depending on the location where testing is carried out and the types of vehicles being tested. It is proposed that the introduction of the testing requirement be delayed by

four months from implementation of the Rule to ease testing agencies through the process of purchasing equipment and training staff.

Used vehicle importers will also need to provide evidence as to what emission standards the vehicles were manufactured to. The emissions code information is included on the standard deregistration papers provided for Japanese imported vehicles. This deregistration information must be provided at time of registration in New Zealand.

However, a very small number of vehicles may not have a determinable manufactured emission standard from the deregistration papers, and another form of evidence will need to be provided. There may be a cost to the importer to provide this because it will have to be obtained from the manufacturer or their agent.

The introduction of minimum emission standards and testing would also incur some minor one-off costs to redesign and print appropriate forms and documentation to record test results for the certification process.

Emissions standards for used petrol vehicles

The draft Rule proposed that the minimum emissions standards for used petrol vehicles start with the Japan 00/02 standard (Note Japanese standards are named for the year or years in which they began to be implemented for different types of vehicles), which would be implemented in New Zealand from 1 January 2008. The draft Rule then proposed that the Japan 05 standard be the new minimum standard from 2010 (a five-year lag).

Submissions from the used vehicle industry strongly opposed the introduction of the draft Rule as proposed. They submitted that a significant lag time existed between when an emissions standard was introduced and when it was fully implemented and that this would restrict significantly more vehicles than the draft Rule intended.

The effect of implementing (unintentionally) stringent restrictions on used petrol vehicles was then modelled in the updated Covec report. Previously, it was identified that VKT and fleet turnover are key components of emissions modelling. Covec assumed that implementing the Japan 00/02 standard as a minimum would have prevented the import of around 50% of vehicles imported in 2006. However, submissions by industry and further research by the Ministry of Transport suggests the reduction would possibly be as great as 80%.

The Covec report assumed that on average, each vehicle will be used more if fleet turnover rates fall. The models used in the report indicate that if the standards were introduced as proposed in the consultation draft Rule, there may be a negative effect on the rate at which air quality improves as older vehicles are not replaced and are driven further. When compared to a base case scenario (which is still heavily reliant on VKT and turnover assumptions), large increases in CO (6.6% increase), HC (1.7% increase) and NO (2.6% increase), were predicted over a ten year period.

The Covec modelling highlighted the importance fleet turnover holds in improving air quality for petrol vehicles. However, it clearly showed that more benefit and less

impact can be achieved if the timing of the standards introduction was slightly delayed.

Delayed implementation of emissions standards for used petrol vehicles (Preferred)

The preferred option is to delay the implementation of Japan 00/02 standards by one year. The Japanese interim emissions standard Japan 98 ("GF") will be the minimum emissions standard from 1 January 2008 and the Japan 00/02 be the minimum emissions standard from 1 January 2009.

The changes to the implementation dates will still see reductions in volumes of imports, but these are expected to be around 30% of 2006 volumes. These reductions are expected to be offset by stockpiling prior to the introduction of standards and by changes to the types of vehicles (for example smaller vehicles or those with higher mileage or lower equipment specification).

The used car industry was generally positive about the delayed introduction, although it often opposes controls on the industry.

It is also proposed that the introduction of the Japan 05 standard be delayed from 2010 to 2012 to also allow a sufficient volume of vehicles to be imported. Covec's figures show that (without considering the impacts of any other future policy options) adopting the delayed implementation dates would have a reduction in harmful emission increases in CO (3% increase), HC (0.9% increase) and NO (0.8% increase).

Emission standard for used diesel vehicles (Preferred)

For diesel vehicles, the consultation draft of the Rule proposed that the Japan 02/04 standard be implemented from 1 January 2008 (a six year lag) and the Japan 05 standard from 2010 (a five year lag).

Unlike the outcome with used petrol vehicles, Covec modelling clearly demonstrated that imposing minimum emissions standards for used diesel vehicles would begin improving air quality with the ten year time frame to 2016 it investigated. The emission of PM₁₀ particulates is measured as opacity and is predominantly produced by diesel vehicles. The report shows that introducing the diesel standards as consulted will decrease opacity by as much as 2.5% by 2016. This is mainly because the typical used diesel vehicle we import is generally older and built to a significantly lower emission standard than a typical used petrol import. Thus, the current imports of used-diesel vehicles do not noticeably improve the fleet.

Modelling also showed that diesel vehicles remain in the fleet much longer than petrol vehicles and so contribute to poor air quality for longer. Heavy trucks tend to be scrapped after an average of 22 years and buses are often not scrapped till an average of 30 years. This compares with an average of 17 years for light vehicles.

Unlike petrol vehicles, emissions control equipment has not developed in large step changes, but incrementally through gradual improvements in engine technology.

More recent exhaust emissions standards need to be adopted to ensure the vehicles entering the fleet are contributing to an improvement in air quality. This, combined with the older average age of diesel vehicles entering the fleet, means that substantially more diesel vehicles will be restricted than petrol vehicles.

Based on the 2006 age distribution of vehicles entering New Zealand, introducing the Japan 02/04 standards in 2008, as proposed would reduce used diesel imports by 93% in 2008 and by 88% in 2009. Introducing the Japan 05 standards in 2010 would again be expected to exclude 93% of used diesel vehicles that would have otherwise been eligible to be certified for entry into the fleet, after which volumes might be expected to slowly increase.

It is therefore likely that the Rule as drafted would effectively prevent most imports of used diesel vehicles for the foreseeable future. This is expected to improve air quality in the short and longer terms, but will have a significant effect on those involved in the importing and sale of used diesel vehicles and also on those who would otherwise have purchased them. However, the absolute volume of used diesel vehicles currently being imported is relatively small (20,000 used diesel vehicles compared to 110,000 used petrol vehicles in 2006), and the total percentage of diesel vehicles sold new is relatively high. In 2006, 55% of the all diesel vehicles certified for entry into the fleet were new and in 2007 (to 1 October) 63% of diesel vehicles were sold new. This compares with petrol vehicles of which less than 35% of those first registered in 2006 were new vehicles.

Analysis has shown that there are niche markets for industries that utilise used heavy diesel trucks (3.5-12 tonnes) and heavy buses (>3.5 tonnes) where 75% and 70% of vehicles registered in 2006 respectively were used vehicles. However, the physical number of these businesses is so small that further analysis has not been possible. The draft Rule may halt the fleet turnover for these industries, forcing them to retain their existing vehicles for longer. The issue is that the used diesel vehicles they are being replaced with are built to such outdated emission standards that any improvement in air quality they provide is marginal. This is not a major issue for light diesels (under 3.5 tonnes) as 80% of these vehicles are already purchased new and many of these models have petrol equivalents.

Limiting the entry to the fleet of older diesel vehicles built to much lower emission standards is expected to have a direct effect in preventing further declines in air quality. This will benefit local government, particularly the Auckland Region, where the contribution to air pollution from vehicles is the greatest. It will assist local government meet to the 2013 deadline for implementation of the National Environmental Standard for Air Quality.

To maximise the potential gains in air quality (the 2.5 % modelled decrease in opacity), it is not proposed to delay the introduction of exhaust emission standards for used diesel vehicles and to proceed with the proposed dates as consulted on in the draft Rule. The Japan 02/04 standard will therefore be introduced in 2008 and the Japan 05 standard will be subsequently introduced in 2010 as set out in the consultation draft of the Rule.

Additional impacts associated with a potential decrease in fleet turnover and import volumes of used petrol and diesel vehicles

The major flow-on costs from the implementation of the draft Rule will occur if fleet turnover rates diminish for both used petrol and used diesel vehicles. Any supply constriction is expected to recover slowly as the fleet turns over an increasing number of vehicles built to the required standards. This will limit the costs of the policy in the longer term (10 to 20 years with draft Rule as average scrappage age of a light vehicle is approximately 17 years, 22 for heavy trucks, 30 for buses).

In the first few years following the implementation of the draft Rule, a reduced volume of used imports would decrease the number of registrations of vehicles new to New Zealand. Registration revenues are paid directly into the National Land Transport Fund (NLTF) and contribute to Crown Revenue. Vehicle registrations only contribute to approximately 2% of the total NLTF, but their combined total contribution was nearly \$35 million in 2006.

The rough figures derived from the Covec report show that used vehicles sales were worth \$2.16 billion and accounted for 59% of the volume of all vehicle sales in 2006, but only 27% of the total worth of all sales. The Covec report explains the difficulties in accurately measuring policy changes caused by the implementation of the draft Rule. It is likely that even with delayed standards a portion of this market will be reduced. This reduction multiplied by the value of the used car industry means that this Rule could, in a worst case scenario, have a large economic impact. The Covec report shows reduction in GDP climbing to \$1.533 billion in 2010, but this figure represents the used petrol standards consulted upon, not the delayed standards of the preferred option. The report also indicated that money no longer spent on used vehicles would be spent elsewhere in the economy, so the overall effect on National GDP is unclear.

Effects on access to vehicles for central government, local government and regional authority fleets are not expected to be significant as these vehicles are generally purchased new.

The 2007 Covec report contained limited modelling of the potential social implications of the draft Rule. The analysis provided by Covec was not undertaken from the prospective effects on lower socio-economic groups, but from the perspective of those who would no longer be able to purchase their preferred import as a result of the draft Rule. It must be noted that used vehicles imports are still a relatively expensive commodity and lower income groups generally purchase much cheaper second-hand domestic vehicles.

One option for people who can no longer purchase their preferred import would be to upgrade to a better import. They could either purchase a newer vehicle with similar features to what they had originally desired or spend the same amount of money and purchase a vehicle of lower quality or fewer features. The magnitude of this welfare loss is difficult to quantify as it is highly dependent on individual budgets and preferences.

If the draft Rule does cause a substantial decrease in import volumes, then it is expected the used vehicle industry will concentrate as smaller and less efficient firms become uncompetitive. Larger firms with diverse supply chains will be the most resilient. Firms that specialise in newer vehicles may even prosper if the composition of imports is forced to shift in their favour.

Modelling potential changes in used vehicle prices is problematic. An analysis of prices for the fifty most popular light vehicle models on online retail sites found that prices for individual models varied widely in relation to factors such as age, condition and mileage. In general, if the effect of the draft Rule is to decrease the average age of used vehicle imports, age accounts for a price increase of 15% per year so a person purchasing a model two years younger would expect, on average, to pay 30% more than they would otherwise have paid for an older vehicle.

The other alternatives for consumers that would have bought a used vehicle import are to instead buy a comparable vehicle from the second-hand domestic market, or temporarily leave the vehicle market and hold on to their existing vehicle for longer. This could potentially raise demand for these vehicles and lead to an increase in prices and some dealers may become more active in the sales and purchase of existing vehicles in the fleet. Other importers may look to minimise economic impact by seeking cheaper vehicles that still meet the required standards, or selling fewer vehicles, with higher margins. However, there may be an issue with a dealer's ability to source these vehicles in an already highly competitive market, exacerbated by a potential supply constraint imposed by some consumers holding on to their existing vehicle for longer.

Low income earners are the most significantly affected by changes in prices and these people are generally active participants in the used vehicle market. If potential increases in demand and supply constraints in the second-hand domestic market do raise prices, low income earners will face a similar set of choices to used vehicle importers. The option to pay more for a similar vehicle is mainly unavailable so this leaves two options: pay the same for a lesser quality vehicle or leave the vehicle market.

Any rise in prices may lead to limited cases of social exclusion as first-time buyers entering the market may spend a prolonged period of time without a vehicle. However, even among lower socio-economic groups, social exclusion is viewed as unlikely due to the rate of vehicle ownership in New Zealand. Data from the 2006 Census shows only 8% of households did not own a motor vehicle in 2006. A significant component of this 8%, such as inner-city apartment dwellers, would not own a vehicle by choice, further reducing the number of potentially affected households. Census data has also shown that although vehicle ownership rates have steadily risen, this is predominantly in households gaining an additional vehicle rather than households without a vehicle obtaining their first vehicle.

Covec considered the social impacts of the draft Rule in their earlier 2006 report (*Socio-economic impacts of emissions standards on used imported vehicles* Covec 2006) and concluded that there was a risk of social impacts. They concluded that "Overall, these [impacts] are expected to be minor compared to the previous policy because it does not result in any sudden loss of vehicle, which can lead to social

exclusion; and does not cause any unexpected (and unavoidable) spikes in the cost of living. At most, the policy may cause slight increases in the prices of vehicles.”

If the draft Rule causes the total volume of imported used vehicles to fall, this may have flow-on effects for companion industries. This includes a potential restraint on trade for industries associated with the entry certification of vehicles and possible growth for businesses associated with repair and maintenance if some vehicles are driven further before end-of-life scrappage.

An additional industry impact, highlighted in submissions, is that a decline in vehicle volumes will reduce the number of vessels travelling between New Zealand and Japan and vessel owners would transfer them to other shipping routes with the risk that they not return if or when volumes increased. The submissions argued that in those circumstances the used car trade would not ever be able to return to previous levels. One submitter also commented that those vessels carried over \$50 million of bulky freight on the return journeys to Japan and this would need to find an alternative carrier if the car carriers were not available.

Fuel consumption and safety standards are generally improved concurrently with exhaust emission standards. The draft Rule is also expected to provide additional benefits in road safety and assuming that purchasers do not alter current purchasing patterns will lead to gains in fuel efficiency at a fleet level, as newer models of the same vehicle are generally more fuel efficient.

Consultation

The draft Rule was released for consultation on 27 May 2007. This document focused mainly on the options and timing of the introduction of the various elements of the draft Rule. The overview document that accompanied the draft Rule contained a series of questions on different aspects of the Rule and on its likely impacts. Eighty-four submissions were received from a wide range of groups including private individuals, vehicle inspectors, dealers in new and used imports, consultants, associations and groups representing the motor industry, motoring groups and enthusiasts, local and central governments and environmental groups.

The proposals in the draft Rule that received the most comment were those surrounding the minimum emissions standards for used vehicles and the implementation timeframe of the proposed standards. There was concern that the Rule as drafted would severely restrict the number of available used vehicles and recommended delaying the introduction of the standards. They noted that if access to vehicles was too limited then people may be forced to hold on to older vehicles for longer with the perverse effect of increasing emissions, with a negative social impact. Virtually all who argued the Rule would not lead to improved air quality cited the 2006 Covec report. The Ministry commissioned the 2007 updated report by Covec in order to assess the validity of the specific concerns raised in these submissions and amendments to the Rule have been made in accordance with advice received.

Submissions from the used car industry provided information on the implementation dates of standards for used vehicles. It was suggested by the Motor Trade Association (MTA), the Independent Motor Vehicle Dealers Association (IMVDA) and

many individual submitters from that sector that the Japan 98 emissions standard (the so called “GF” standard) be introduced as the starting point and later standards introduced gradually thereafter. It was also suggested by many that the introduction of the Japan 00/02 standard (the proposed minimum standard for petrol vehicles in the draft Rule) be delayed.

Importers and purchasers of used diesel vehicles argued strongly against the introduction of the implementation dates for minimum diesel vehicle standards in the draft Rule. This is on the basis that the economic impacts on their businesses would be significant. In particular, importers of used buses that are converted into campervans for private use and importers of specialist vehicles, such as cherry pickers, waste collection trucks and mobile water blasters argued that they would be particularly affected by the draft Rule. The Ministry accepts that these groups may be adversely affected. However, the number of such businesses was so small that detailed analysis was not possible. To reduce the impacts of this, the Rule will allow these vehicles to replace their engines with more recent compliant engines. This may be cost effective, especially for vehicles that may be otherwise modified, such as the campervans or the specialist equipment where it is the machinery on the back of the vehicle, rather than the engine that is the most valuable part of the vehicle.

The following departments and agencies have been consulted on the contents of the Regulatory Impact Assessment: New Zealand Customs Service, Ministry of Economic Development, Energy Efficiency and Conservation Authority, Ministry for the Environment, Ministry of Foreign Affairs and Trade, Ministry of Health, Land Transport NZ, New Zealand Defence Force, New Zealand Police, Transit New Zealand, Ministry of Social Development and the Treasury. The Department of Prime Minister and Cabinet and Local Government New Zealand have been informed of its contents.

Treasury did not support the proposals for used vehicle standards and argued that the costs outweighed the benefits. The Ministry of Transport does not agree with the Treasury’s comments. The benefits of the Rule are expected in the longer term, beyond the ten year time frame analysed by Covec, because it takes nearly twenty years for the vehicle fleet to turn over. While one possible scenario is that we may see an increase in emissions in the first years of the policy (and this assumes the Government takes no other actions to reduce these and that no external factors such as fuel price rises alter people’s behaviour) emissions must decrease if the vehicles entering the fleet are progressively cleaner than the vehicles that they are replacing.

Determining when fleet-wide emission reductions will occur depends on how quickly existing vehicles leave the fleet and this cannot be predicted. Treasury’s comments also indicate they do not support the introduction of any controls on used vehicles. However, Covec’s modelling consistently showed controls on diesel vehicles to be positive. In contrast, not acting on used diesel vehicles would therefore lead to an increase in emissions of the most harmful kind.

The views of departments are reflected in the analysis and in the accompanying Cabinet Paper.

Implementation and Review

It is planned to implement the Rule on 1 January 2008 or 28 days after it is gazetted, whichever is the later.

There will be a relatively short period of time between the signing of the Rule and its coming into effect. Therefore, it is proposed that the Rule allow a one-month delay for the new entry-into-service requirements for vehicles that may have been in-transit when the Rule came into effect. As the average shipping time from Japan is three weeks, a four-week delay is considered the minimum that is appropriate. The draft Rule contains a savings provision so that the Rule will only apply to vehicles inspected at the border after 1 February 2008.

The draft Rule also proposes a four-month delay for the introduction of the emissions testing on used vehicles. This is the minimum practical delay to allow Land Transport NZ to finalise the legal requirements for testing and for industry to purchase equipment and to train staff in its use. This provision will come into effect on 1 May 2008.

The introduction of the proposed Rule is expected to be the subject of considerable media interest and receive wide publicity in the mainstream media at the time of its release. In addition, the Ministry intends to provide articles for trade magazines and publications associated with the motor industry to inform them of the new controls. The Ministry of Transport will also work with industry groups, such as those representing used vehicle importers and the motoring public to publicise any controls.

Land Transport NZ is the agency responsible for implementing Land Transport Rules and will also be publicising the Rule.

The Ministry will monitor volumes of vehicles being imported and is required to report back to Cabinet in three years time on the effectiveness of the proposals. In addition, there are known to be two emissions standards that have yet to be fully implemented in their jurisdictions that are not included in the draft Rule. It will be necessary to amend the Rule to include them and this may provide an opportunity to refine the policy for other standards at that time, if this is shown to be required.