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April 23, 1981

Director
Standards and Regulations Division
ONAC Docket 81-02 (Medium and Heavy
Trucks)
ANR-490
US E.P.A.
Washington, D.C. 20460

MVMA is submitting for the consideration of the EPA detailed responses to issues raised in both the January 27 and March 19, 1981 Federal Register notices regarding "Noise Emission Standards: Medium and Heavy Trucks and Truck Mounted Solid Waste Compactors." MVMA has already expressed in a letter to President Reagan, dated February 3, its recommendation that the 80 dB noise standard for medium and heavy trucks be withdrawn until the health and welfare benefit of such a regulation can be more fully evaluated and subsequently justified.

In addition to addressing the particular standards of the regulations, MVMA's submission also serves to both clarify and correct some of the statements made by EPA in its support write-up for the January 27 Federal Register notice. MVMA would be pleased to discuss any of these comments with EPA staff at your convenience.

Very truly yours,

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MVMA RESPONSE TO EPA FEDERAL REGISTER NOTICES
OF JANUARY 27 AND MARCH 19
REGARDING "NOISE EMISSION STANDARDS:
MEDIUM AND HEAVY TRUCKS AND TRUCK MOUNTED
SOLID WASTE COMPACTORS"

APRIL 23, 1981

T. Response to March 19 <u>Federal Register</u> Notice (Title 40 Code of Federal Regulations Part 205 Noise Emission Standards: Medium and Heavy <u>Trucks and Truck-Mounted Solid Waste Compactors</u>)

A. 80 dB Truck Noise Regulation

On March 19, the EPA published in the Federal Register a notice that invited interested parties to comment on whether or not the 80 dB noise standard regulation for medium and heavy duty trucks should be rescinded. MVMA submits that the 80 dB standard should be withdrawn promptly and that no further regulations be imposed until the "health and welfare benefits" of such regulation are more fully evaluated and subsequently justified with an updated and adequate cost-benefit study.

MVMA's position on this issue was clearly delineated in a letter to President Reagan on February 3. In that letter, MVMA noted the following:

"Medium and heavy duty trucks are regulated with respect to noise by EPA under authority of the Noise Control Act. The current standard of 83 decibels became effective on January 1, 1978. EPA promulgated a more stringent standard of 80 decibels originally to be effective

January 1, 1982. Recently, the outgoing EPA
Administrator deferred the effective date of the standard
one year to January 1, 1983, primarily because of the
recent downturn in the economic condition of the truck
manufacturing industry.

Two truck manufacturers petitioned EPA to withdraw the standard.* EPA analysis methods and data were challenged leading the manufacturers to conclude the 80 decibel standard was not, under present conditions, justified on a cost-benefit basis. Two other manufacturers requested the 80 decibel standard be deferred for 2 to 3 years because of the excessive burden of engineering and compliance costs and the capital investments required.

The cost of meeting the 80 decibel standard, according to EPA, ranges from \$307 to \$876 per truck with overall costs in the first three years of implementation totaling \$468 million. The community noise impact of medium and heavy truck noise control is one measure of the benefit of noise control. However, there is no evidence that the reduction from 83 decibels to 80 decibels would afford any "health and welfare" benefit to the community. It involves merely annoyance."

^{*}Since the time of the MVMA letter of February 3, one additional truck manufacturer as well as The American Trucking Association have filed petitions asking for a withdrawal of the 80 dB standard.

In view of the absence of a proven health and welfare benefit, MVMA again urges the Administrator to rescind the 80 dB truck noise regulation.

B. <u>83 dB Truck</u> Noise Regulation

Though the March 19 Federal Register notice did not specifically request comments on the present truck noise regulation, it seems appropriate to address this matter in light of the possibility that the 80 dB regulation may be rescinded.

MVMA has closely examined the effects of varying levels of truck noise control through the use of a sophisticated community noise exposure model, developed for MVMA by Battelle Memorial Laboratories, Columbus, Ohio. The model demonstrates that the most significant reductions in community noise exposures result from the implementation of the 83 dB truck noise standard. Thus the environmental benefits appear to be worth the effort of controlling truck noise emissions to a maximum level of 83 dB.

In addition, and perhaps of equal importance, the federal noise control program--which preempts state and local regulation of truck noise--has served an extremely useful purpose. It has prevented the nation's efforts to lower noise exposure from trucks from degenerating into confusion and chaos for the truck manufacturers, the trucking industry and the millions of consumers that are served by them.

Many states, counties and municipalities have legislated vehicle noise regulations. These regulations, however, feature varying levels of stringency, dissimilar enforcement methods and reporting requirements. Elimination of the federal preemption for trucks could erode the progress already achieved in reducing noise exposure in areas with local standards less stringent than the current federal standard. For those areas where future local standards might be set at a more stringent level than the current federal standard, truck manufacturers would be faced with the dilemma of being forced to build a high cost, small volume fleet of specially-quieted trucks for those areas or not sell trucks in those areas.

II. Response to January 27 Federal Register Notice (Title 40 Code of Federal Regulations Part 205 "Noise Emission Standards: Medium and Heavy Trucks and Truck-Mounted Solid Waste Compactors)

A. Introduction

On January 27, 1981, the EPA published notice in the Federal Register of a final rule that deferred by one year (to January 1, 1983) the effective date of the 80 dB noise standard for medium and heavy trucks. The EPA invited interested parties to comment on this action by April 24. In response, MVMA hereby submits that the Administrator's one year deferral is inadequate. MVMA instead recommends that the 80 dB standard be withdrawn and that no further regulation be imposed until the "health and welfare" benefit of such regulation is more fully evaluated and subsequently justified with an updated and adequate cost-benefit study. MVMA also notes that EPA has the authority to make this change administratively.

In addition to the publication of the deferral decision, EPA also published supplementary information in the January 27 Register notice that apparently were meant to clarify and resolve for the record a number of different contentious issues associated with the noise regulation. Notwithstanding this material, MVMA submits that the record has not yet been portrayed correctly.

For the purpose of correctly assessing many of these contended issues, MVMA offers the following responses to the EPA comments, organized with reference to the numbers with which EPA listed them in the Register notice.

B. Contended Issues Within January 27 Federal Register Notice

3.3 Economic Justification of 80 dB Regulation

It is the EPA contention that the Council on Wage and Price Stability (COWPS), in its cost/benefit analysis of the 80 db Regulation, did not attempt to place a dollar value on the potential health and welfare benefits. Nor did it consider the persons removed from impact, except to the extent that these benefits are reflected in increased property values. As such, EPA assumes its own analysis to be more appropriate.

It is the MVMA view that the EPA analysis is improper-not COWPS. To use EPA's own criticism of COWPS--that it
did not ascribe a dollar value to the health and welfare
benefits of the regulation--neither did EPA. Moreover,
EPA has not proven conclusively that "health and welfare"
benefits accrue to the community as a result of the 80 dB
noise standard. The standard merely addresses an
annoyance condition.

This fact was confirmed by EPA in its 1976 Background Document, on page A-3-2: "Action in Response to Public Comment: The benefits of the new truck noise emission regulations have been treated in terms of the reduction in annoyance caused by truck noise."

Notwithstanding the contentions about the health/welfare benefit, MVMA submits that the COWPS analyses of May 9, 1975 and July 8, 1975 are actually more representative of the true cost/benefit results of the 80 dB regulation than is EPA's. As such, the more instructive conclusions about this issue--presented in the COWPS analyses are: "Indications are that the noise standards should be no lower than 83 dBA...The findings of this analysis of the proposed regulations strongly indicate a lack of sufficient economic justification for the 80 dBA level."

The deficient EPA analysis of benefits, and in particular the link that it attempted to make between dollar costs and reductions in noise exposures, was further addressed by COWPS with the following observation: "Of particular concern to us is the relative lack of attention that has been paid to evaluating the benefits of what is certain to be an extremely costly regulation. In its background

document to the proposed standards, EPA has measured benefits in terms of the number of people who will obtain annoyance relief from the reduced noise levels proposed in the regulation...Comparing the costs of a proposed regulation against the number of people who would no longer be annoyed if the regulation were promulgated is like comparing apples with oranges."

At the very least, EPA should have presented some type of decision formulation that spelled the number of persons needing noise exposures reduced and the amount of reduction to justify a projected cost. To merely assert that a reduction in noise exposure is worth the cost, is to argue in the extreme that a reduction of 1 dB for one person justifies a regulation of this type.

Unlike EPA, COWPS at least made an effort to reduce all costs and benefits to a single common factor, i.e., dollar value. As noted by COWPS, ... "Certainly, we consider their use (property valuation) to be more justified than the setting of such standards with no reference to the value of noise abatement to the affected population."

MVMA fully agrees with the COWPS statements that EPA has not paid sufficient attention to the benefit analysis of the regulation. MVMA believes that the consideration only of population impact, without regard for the economic value of said impact, does not constitute a proper or complete cost/benefit evaluation. Furthermore, as previously stated, there is no evidence that a move from 83 dB to 80 dB affords any "health and welfare" benefits to the community.

3.4 Burden of Interest Rates; EPA Prediction

The EPA has represented—higher interest rates caused by inflationary pressures as no burden by themselves on an industry because the higher operating costs are passed through to customers thereby generating an equal increase in revenue.

EPA assumes that businesses can simply recoup higher operating costs by increasing the price of their product. Such is not the case. There is a great deal of buyer resistance to higher prices, and never has that been more apparent than it is now.

EPA states that an increase in the price of trucking services would not necessarily cause a loss of business because it would only bring the relative cost of trucking in balance with--concurrent increases from inflationary pressures on alternative modes of transportation. This statement represents a belief that inflation is acceptable as long as it applies to everyone. Obviously, this point of view is without merit.

while we do not represent that regulation alone is responsible for the economic woes of the country, we do believe that EPA has grossly underestimated the impact of regulatory action. The synergistic impact of higher interest rates, higher product costs and higher operating costs definitely has resulted in a burden that produces a meaningful impact on the economy.

It is specious to argue that higher costs are not a burden if they can be passed on to an industry's customers.

3.5 Cost-Benefit Justification of 80 dB Regulation
Within this issue, EPA attempts to address the allegation
that the 80 dB standard cannot be justified under a cost/
benefit analysis.

In review of the EPA response to this issue, it is clearly evident that EPA has not responded to the central issue under consideration—that EPA's cost—benefit analysis is flawed. Attention is called to the previous comments made under Issue 3.3 of this response. A cost/benefit analysis is not complete until an economic value is assigned to the particular benefit in question. To compare the cost of the standard in dollars to the benefits in terms of the numbers of persons affected, is improper. Moreover, to state only the number of persons affected and to not in any way quantify the actual change of impact in dB levels on these individuals, is to make the benefits even more vague.

It is noteworthy that some evaluations are conducted using an L_{dn} level of 55. However, population exposure to L_{dn} = 55 (or greater) is only one measure of noise impact—and a controversial measure at that.

MVMA believes that it is incorrect and misleading for EPA to suggest that its re-analysis shows a 57% increase in benefits over those noted in the original analysis when the only consideration in the definition is population exposure. MVMA also submits that it is invalid for EPA to suggest "that the 80 dB regulation is more costeffective than originally estimated" because the EPA has consistently misused the commonly accepted definition of the economic term "cost-effective". Implied in the EPA comment is the fact that the value of the benefits exceeds the costs required to acquire those benefits. In order to arrive at this decision point, both benefits and costs need to be expressed in similar units. The most common set of economic units is, of course, dollars. Indeed, the EPA repeatedly has analyzed the costs associated with the noise regulations, both capital and operating. However, on the subject of benefits, EPA has calculated only the number of persons that would be impacted by noise and the physical reductions in noise levels that could be expected if the noise regulations were enforced. It is impossible to arrive at a rational decision-making procedure when benefits are expressed in dB's while costs are expressed in dollars. Obviously, if the consumer will ultimately pay for any noise regulation, it would seem only reasonable to determine the dollar value that consumers place on the benefits they will receive as a result of--regulation. When

this is done, it becomes a simple matter to decide when consumers no longer value the benefits they are paying for.

While we appreciate the difficulty of trying to attach a dollar value to such benefits as noise, we feel this is an absolute necessity to determine the value of any noise regulation. There have been attempts to do just this, such as the COWPS report of May 9, 1975. While the EPA has chosen to disagree with the procedure and methodology used in the COWPS report, it has offered nothing in its place that would perform a similar function. Until the EPA performs a correct economic analysis, the debate over the value of benefits versus costs will continue.

Furthermore, caution must be exercised when evaluating and interpreting the results of an analysis presented as curves showing the number of persons exposed as a function of $L_{\rm dn}$. The shape and steepness (slope) of the curves defining the number of persons exposed at any given $L_{\rm dn}$ indicate that the large number of persons impacted at $L_{\rm dn}$ = 55 will experience only a small change in $L_{\rm dn}$, a change that is probably indiscernable. Such small changes are discernable only if they result from a reduction of the high sound levels of a small number of

short duration events. However, such events have been essentially eliminated by the current 83 dB new truck noise emission standard and the existing in-use truck noise regulations. The number of such events will not be reduced appreciably further by the imposition of an 80 dB new truck noise standard.

3.7 Added Weight/Fuel Economy Penalty

EPA maintains that increased fuel costs caused by the added weight of noise control hardware represent only a small part of the annual overall operating cost. It finds that this cost is acceptable for the resulting reduction in noise.

In Table 3.7 (46 FR at 8501) the EPA breaks down the figures to added cost per truck per year which makes the cost seem insignificant. It is more instructive if the increased cost per truck (EPA figures) is applied to the number of trucks put into service each year using the EPA truck production forecast provided in Figure A-7 (46 FR at 8512).

The cumulative added fuel cost for a ten year period (1983-1992) is \$534 million based on 1980 fuel prices. There already have been sharp increases in fuel prices thus far in 1981 and more increases are predicted.

The attached table depicts the added and cumulative costs of increased fuel consumption as estimated by the EPA.

When the priority of fuel economy is considered with the fact that dollars spent for fuel greatly affect our balance of payments, MVMA does not believe that a more stringent noise standard is justified.

Dividing the ten year cost increase of \$534 million by a fuel price of \$1.50 per gallon shows regulation leads to a ten year fuel loss of over 3.6 billion gallons (nearly 85 million barrels of crude using the equivalent of 42 gallons of fuel per barrel). Not only does it raise questions with respect to foreign exchange and dependence on foreign oil etc., but it also raises concern over conflicting governmental policies, i.e. DOT's voluntary program which aims at saving fuel and EPA's regulation which purports to lower noise levels while increasing fuel consumption.

3.9 Useability of Some Medium Duty Diesel Engine Lines
It will be difficult to quiet certain diesel engines.

EPA acknowledges that these engine lines will probably be unuseable in truck applications. EPA argues that the slack can be taken up by selling those engines for other uses.

Some diesel engines will no longer be marketable for truck applications because they are inherently noisier and therefore not attractive to the truck manufacturer if lower truck noise standards are applicable. If the engine manufacturer has another engine model which recovers these lost sales, obviously the manufacturer will not be hurt. However, if the engine manufacturer does not produce another engine in that class, he will lose the sale.

The EPA understands the above arguments but maintains that the engine manufacturer will recover the lost sales by selling the engines for marine applications. If indeed the marine application exists then, the sale also exists now; therefore, it is not a new sale. Moreover, it adds nothing to the engine manufacturers' sales volume. In fact, if the truck sale is lost, the marine application may also be lost as it might not be profitable to manufacture the engine solely for the small volume required for marine installations. EPA's reasoning fails to address the real economic difficulties caused by noise regulations.

3.10 Preventive Maintenance and Sound Barriers

EPA estimates that the 80 dB regulation will increase

maintenance costs by about \$150.00 per truck per year.

With reference to similar EPA estimates made for a

control level of 78 dB, a comparison with the actual

experience of the United Parcel Service (UPS) in its quiet truck program, 1 indicates that EPA's estimates are 27% low. This suggests an annual cost of not \$150.00 but rather of \$192.00 per truck when this percentage is applied against the EPA 80 dB estimate as noted in the chart below.

Additional Maintenance Costs Reflected By EPA Estimates and UPS Actual Experience

dna.	80 dBA	EPA 80 dBA	EPA + 27%	78 dBA	PA 78 dBA	UPS 78
dBA \$	1975 \$	1980 \$	1980 \$	1975 \$	1980 \$	1980
Medium Gas	23	34	43	108	158	
Medium Diesel	95	139	177	297	434	
Heavy Gas	45	66	84	131	192	
Heavy Diesel	103	151	192	166	243	309

EPA 1975 data taken from Table D-3 Page D of EPA background document.

Using the revised cost, applying it to the 80 dB figures and using the production projections cited in Figure A-7 of the EPA appendix, MVMA finds that the annual additional maintenance costs will grow from \$45 million in 1983 to \$73 million by the year 2000. This represents a total additional maintenance cost in excess of \$8 billion (1980 dollars) over the 17 year period (which is how long it will take to replace 90% of the existing trucking fleet.)

^{1/} UPS Quiet Truck Program Field Test Progress Report by James M. Lewis, presented at EPA Noise Control Technology Contractor's Coordination Briefing, Warren, Michigan February 4,5, 1981.

3.14 Exclusion of Deviant Vehicles, Masking Effect of Unregulated Sources, Impact of Outliers

Within this issue, the three items of, (a) deviant vehicles, (b) the masking effect of tires and (c) the impact of outliers are addressed.

Exclusion of Deviant Vehicles

EPA indicates that, by excluding deviant vehicles, it has come up with conservative projections of truck noise health and welfare impacts. In other words, the community impact of truck noise would be greater than what EPA represents if deviant trucks were included. While this is true, it must be noted that EPA's assessment of benefits is far from conservative. In fact, when deviant vehicles—a real world phenomena which will continue to exist—are considered, it becomes apparent that EPA has overstated the benefits. In other words, the benefits will probably be less than what EPA represents inasmuch as the deviant vehicle will mask the noise reductions which EPA claims will be accomplished with the 80 dB regulation.

Tire Noise

The question whether tire noise will mask the effects of quieting the power train has been brought up many times.

EPA claims that because most noise impacts occur in urban environments at speeds less than 35 mph, tire noise will not mask reductions in power train noise. The Federal
Register notice states: "EPA's analysis clearly

distinguished between benefits that accrue to people exposed to urban traffic noise (low speed) where tire noise is only a very minor contributor, and to those exposed to freeway traffic noise (high speed) where tire noise is a significant contributor. This analysis shows that approximately 92% of traffic noise impacts occur in the urban environment where tire noise is a relatively insignificant contributor. MVMA will agree that most impacts occur in the urban environment, but it disagrees that tire noise is as insignificant as the EPA represents.

As noted earlier, Battelle Laboratories, under contract to MVMA, has developed a model similar to that which was developed by EPA. Battelle's model is very complete in that it takes many factors' into consideration. Further, the input data used in the Battelle analysis is from current vehicles, while the input data used by EPA is already over 4 years old. The technical integrity of the model itself was recognized by EPA in its observation "From the description of the Battelle model supplied to EPA by a manufacturer, the EPA and Battelle models appear sufficiently similar so as not to be a major point of contention".

Results available from the Battelle model show the apportionment of noise exposure by road types. This allows one to compare the number of persons exposed to low speed traffic noise (where tires are insignificant noise contributors) to the number of persons exposed to high speed traffic noise (where tires are a significant noise source). Exposures by road types for an 83 dB regulated scenario are shown in the table below.

Apportionment of Exposure by Road Types (83 dB Regulation)2/

	Population	Exposed	Above	Given	Ldn (Mi	llions)
Road Type	<u>55</u>	60	65	70	75	80
Interstate	14.5	5.8	2.3	0.9	0.3	0.02
Other Freeway	8.0	3.1	1.3	0.5	0.1	0
Major Arterial	21.7	9.4	3.8	0.9	0.02	0
Minor Arterial	15.5	6.6	1.8	0.03	0	0
Collector	11.9	4.7	0.9	0	0	0
Local Street	11.3	0.4	0	٥	0	0

Using the "level weighted person" concept recommended by EPA, this table can be transformed to equivalent "level weighted persons", as shown below:

Equivalent Number of Persons Exposed (83 dB Regulation)
'Above Given Ldn (Millions)

Fractional Impact	55 (0.125)	60 (0.375)	65 (0.625)	70 (0.875)	$\frac{75}{(1.125)}$	80 (1.375)		
Road Type				Tota	als 8			
Interstate Other Freeway Major Arterial Minor Arterial Collector Local Street	1.81 1.0 2.71 1.94 1.49	2.18 1.16 3.53 2.48 1.76 0.15	1.44 0.81 2.38 1.13 0.56	0.79 0.44 0.79 0.03 0 0	0.34 0.11 0.02 0 0 0	0.03 0 0 0 0	6.59 3.52 9.42 5.58 3.81 1.56	22 12 31 18 12 5

^{2/} J. D. Allen and M. D. Kurre, "Report on the Contribution of Medium and Heavy Trucks to Community Noise on a National Scale, to Motor Vehicle Manufacturer's Association," November 1980, Battelle Columbus Laboratories, 505 King Avenue, Columbus, Ohio 43201.

This table allows for a comparison of the percentages of "equivalent persons" exposed by roadway type, which provides an indication of how serious tire noise will be. From the percentage column on the far right, 22% of the "equivalent persons" are impacted by noise originating from interstates, while 12% of the "equivalent persons" are impacted by other freeways. This gives a total of 34% of the "equivalent persons" who are impacted by traffic noise that originates from high speed sources where tire noise is a significant contributor. This is over four times the EPA's estimate of 8%. In addition, MVMA also believes that a good portion of the noise impact on major arterials is at speeds significantly in excess of the EPA's model of 27 mph, making tire noise even more significant. For example, the difference of 27 to 35 mph increases tire noise by 4 dB. 83 dB trucks, this speed change influences the truck passby level from 0.8 to 1.5 dB depending upon engine types and number of tires. These results show that tire noise cannot be as easily discounted as the EPA contends.

From a different perspective, EPA indicates within its discussion of the next issue that significant population exposure reductions at the higher $L_{\mbox{dn}}$ values represent an important consideration in assessing the benefits of the 80 dB regulation. Following this line of reasoning, it

is instructive to note that, according to the Battelle model, all of the exposures in excess of 80 L_{dn} occur on interstates and major freeways in the largest urban areas. Similarly, two thirds of the exposures in excess of 75 L_{dn} occur on the same road types in the same locales. At the speeds which are experienced in these situations, tire noise again emerges as a major issue. It is misleading and incorrect for EPA to insist as it does that tire noise is a relatively insignificant contributor.

Impact of Outliers

An outlier is defined, for the purpose of this discussion, as a vehicle which has some characteristic that grossly exceeds an average value or accepted norm. Surveys on noise and annoyance have shown that annoyance increases when single sound events are distinguishable from the continuous ambient background noise level. For example, a single noisy vehicle in a generally less noisy traffic stream is easily identifiable and, if loud enough, can cause annoyance. MVMA believes that a relatively small percentage of vehicles, the statistical outliers, are the source of a disproportionate percentage of the community annoyance. A table from the EPA's background document (pg. 437, Table 420 of EPA background document 550/9-76-008) should help to illustrate this

point. The table below compares the noise levels for the (then) existing unregulated trucks in 1976, future 83 dB trucks, and future 80 dB trucks.

Percentile Noise Levels for Individual Truck Passbys (Pg. 437, Table 420 of EPA Background Document 550/9-76-008)

	Percen			
Truck Type	L ₅₀	L10_	<u>L</u> 1	<u>Lo.1</u>
Existing Trucks 83 dB Regulated Trucks	83.5 dB 77.2 dB	88.2 dB 79.1 dB	91.8 dB 80.5 dB	94.9 dB 81.8 dB
80 dB Regulated	76.0 dB	77.9 dB	79.3 dB	80.6 dB

It should be noted that going from the unregulated environment to 83 dB regulated trucks dropped the L_{10} , L_{1} , and $L_{0.1}$ (10 percent, 1 percent, and 0.1 percent percentile trucks) noise levels 9.1 dBA, 11.3 dBA, and 13.1 dBA respectively. Additional regulation to 80 dB drops the L_{10} , L_{1} , and $L_{0.1}$ levels only an additional 1.2 dB, each. Obviously, the first regulation of 83 dB was much more effective than the additional regulation of 80 dB would be.

MVMA therefore submits that the 83 dB regulation is effective at removing those vehicles likely to cause the most annoyance. This regulation placed all truck manufacturers on an equal footing and removed all incentives for building outliers. Any subsequent regulations at a lower level would give little relief from any additional outliers because they no longer exist

in the new vehicle population. Outliers in the current regulated environment may develop only with time, if required maintenance is not performed. However, these vehicles are regulated by BMCS and do not belong in the EPA's analysis of the effectiveness of EPA regulations. Attempts to make small noise reductions in new vehicles compensate for a few existing, inadequately maintained, noisy vehicles are inefficient and should not be the goal of EPA.

3.15 Interpretation of Battelle Model Results

Before responding to the specific issues cited under this topic, it is necessary to first clarify a potential mis-representation of an issue by EPA in the Federal Register. EPA statements imply that the six conclusions noted in 3.15 that relate to judgments about the community benefit of an 80 dB regulation were derived solely from the Battelle Laboratories study. It should be understood that the Battelle analysis only provided an objective technical review of the issues. The noted conclusions were based only in part on the Battelle work, and were conclusions made by one vehicle manufacturer and not by Battelle.

MVMA's responses to the specific sub-issues identified in 3.15 are as follows:

- 3. EPA insists that the reference level of L_{dn} 55 has been accepted by internationally recognized "experts" as the maximum level below which the U.S. population would not be at risk from noise exposures. But, in Appendix H of the criteria document, some of the original experts who worked on this issue expressed strong reservations about the value of the L_{dn} 55. MVMA knows of no consensus that supports EPA's contention that the L_{dn} of 55 represents the maximum level below which a population could be exposed without any risk. MVMA therefore asks that EPA either provide such documentation or withdraw the contention—at least in the terms in which it is presently described.
- 6. The EPA commentary suggests quite significant benefits in reducing the standard from 83 dB to 80 dB.

 MVMA submits that the EPA analysis overemphasizes the effects of the 80 dB regulation when compared to the 83 dB regulation. This may be explained by again noting that the EPA analysis decreased tire noise simultaneously with a reduction in powertrain noise. The Battelle report shows the reduced impact

due to the 83 dB regulation to be 9 percent of total population or a 16 percent reduction of those impacted @ L_{dn} 55, rather than 19 percent indicated by EPA. Similarly, Battelle determined the reduced impact of the 80 dB regulation to be 15 percent of total population or 26 percent of impacted @ L_{dn} 55, rather than the 27.3 percent indicated by EPA. Also, EPA fails to recognize increase in miles of road and spreading of population along those roads. The percentage of people impacted makes more sense than absolute numbers.

Finally, exposure of 0.6 dB may be quantifiable with instruments as EPA contends, but it is acoustically indescernable to listeners under conditions of a slight (12 percent) increase in traffic flow or a changing in the distance from the roadway by 12 percent. On the other hand, if the 0.6 dB increase were caused by one percent of the vehicles being 12 dB louder, there would be a significant increase in annoyance complaints. Eliminating the few loud vehicles is important, but this has been accomplished by the 83 dB regulation so that a further reduction to the 80 dB regulation will indeed be imperceptible without exposure measurements.

Summary

MVMA has prepared this response to both present its considered position and clear up misstatements presently in the public record on this issue. It would appear from the thorough examination given by MVMA to the issues in the public record that the nation's environmental and industry interests could be best served by withdrawing the 80 dB medium and heavy truck noise standard.