Mr. Kenneth E. Feith  
Standards and Regulations Division (ANR-490)  
Office of Noise Abatement and Control  
U.S. Environmental Protection Agency  
Crystal Mall Building  
1921 Jefferson Davis Highway  
Arlington, VA 22202

Dear Mr. Feith:

Noise Cost Data re Recision of the January 1, 1983  
80 dB Noise Emission Standard for Medium and Heavy Trucks

In response to your letter dated May 5, 1981, which was addressed to  
Mr. Donald H. McPherson, the following additional information is  
provided:

Cost of 80 dB Noise Regulation

In the General Motors comments dated April 21, 1981 (USG 350-81-9)  
we provided a figure of $365 as the average price increase per truck  
to go from an 83 dB regulated level to an 80 dB level. This is a  
sales weighted average figure and in order to give EPA further insight  
as to the economics of noise control, a further breakdown by truck  
type is provided.

<table>
<thead>
<tr>
<th>Total Industry</th>
<th>Medium Duty (Gasoline)</th>
<th>Heavy Duty (Diesel)</th>
<th>Conventional Tilt</th>
<th>Total Truck Sales (Units 600's)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Seven Year Forecast</td>
<td>Fleet Volume</td>
<td>214</td>
<td>300</td>
<td>1,631</td>
</tr>
<tr>
<td></td>
<td>(Units 600's)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Initial Cost to Consumer</td>
<td>50</td>
<td>300</td>
<td>415</td>
<td>400</td>
</tr>
<tr>
<td>Lifetime Service Requirements</td>
<td>105</td>
<td>1,575</td>
<td>1,105</td>
<td>2,100</td>
</tr>
<tr>
<td>TOTAL</td>
<td>155</td>
<td>1,875</td>
<td>1,520</td>
<td>2,500</td>
</tr>
</tbody>
</table>

*Previously provided to EPA
The EPA has correctly assumed that not all trucks would require $365 of hardware to achieve an 80 dB level. For gasoline powered medium duty trucks, which represent a small and diminishing segment of the affected fleet, a consumer cost of only $50 would be required, primarily to add viscous clutch fans. However, for diesel powered trucks in all categories, various engine quieting techniques, such as thicker castings, sound baffles and special isolated oil pans and valve covers would be required as would heavy-duty dual exhaust systems and, in most cases, sound insulating shields for the engine and transmission. The costs for diesel vehicles range typically from $300 to $415. It should be noted that diesel-powered vehicles are increasing in sales.

**Lifetime Service Costs**

The cost of servicing these vehicles throughout their lifetimes would be increased by the necessity to remove and replace noise shields to access actual service points. Furthermore, the cost of replacement parts such as the heavy-duty dual exhaust systems and isolation gaskets would increase substantially from their present day counterparts. Actual United Parcel Service field experience with trucks incorporating similar noise reduction features supports these estimates of incremental service cost.

These estimates are based on technical requirements determined by actual prototype testing and subsequent production releases. We have previously provided EPA with a description of the technical requirements. Because the hardware definitions are based on actual test programs, we consider the requirements to be firm.

With regard to the EPA request for component noise levels before and after test, we regret that we are not in a position to provide this detailed information. Furthermore, we do not consider it germane to the question of cost of noise control.

We hope the above additional information will satisfy your requirement. If we can be of further assistance, please contact the undersigned.

Sincerely,

Paul P. Pataky
Assistant Staff Engineer
International Regulations
P. P. Pataky
Environmental Activist Staff

General Motors Corporation
General Motors Technical Center
Warren, Michigan 48090

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