

OPMO-0184

n-96-01
II-A-978

Hino
HINO MOTORS, LTD.

TELEX: HINOLD J22946 CABLE: HINOMOTOR TOKYO PHONE: TOKYO (03) 272-4811

Our ref. TUSA-00109

January 9, 1985

Mr. Kenneth E. Feith
Specialist for Noise Abatement
U.S. Environmental Protection Agency
Office of Noise Abatement and Control (ANR-490)
Washington, D.C. 20460
U. S. A.

Dear Mr. Feith,

I'm now pleased to have performed my obligation suspended for a long time, that I promised you to send the comment on your New Noise Regulation action.

Attached please find our Company comment for 1986 EPA New Noise Regulation.

I must say again that I'm sorry to have kept you waiting so long. If you have any questions on this issue, please don't hesitate to contact me.

Thanking you in advance for your consideration on this matter.

With our best regards,

Yours faithfully,

Hino Motors, Ltd.



S. Ikoma
Deputy Manager
Technical Dept.
Technical Div.
Overseas Operations

SI/mk

rec. S. 1/16/85

Hino
HINO MOTORS, LTD.

TELEX: HINOLTD J22946 CABLE: HINOMOTOR TOKYO PHONE: TOKYO (03) 272-4811

Our ref. TUSA-00108

January 8, 1985

Mr. Kenneth E. Feith
Specialist for Noise Abatement
U.S. Environmental Protection Agency
Office of Noise Abatement and Control (ANR-490)
Washington, D.C. 20460
U. S. A.

Hino opinion for comming EPA
80 db(A) Truck Noise Standard

1. General Comment

We consider that it is possible to achieve the EPA 80 db(A) Truck Noise Standard of 1986 by our available technology. But as we have to adopt Engine enclosure, the cost and weight will increase and problems such as inspection and serviceability for engine maintenance and the Engine cooling performance becoming worse will arise.

To minimize these problems, noise abatement by the modification of the engine itself is under examination.

Treatment of exhaust gas emission control and noise control is closely related with each other which we cannot consider separately for the investigation and production convenience, so we are now proceeding with the investigation also for comming New Regulation on Nox and particulate which is proposed the enforcement from 1987.

It is a great economical loss for us to adopt 2-stage tactics for the treatment on Noise abatement and Exhaust gas emission during only one year lapse, yet we won't be in the situation to adopt both the treatments at the same time from 1986.

Therefore, we would like to request you strongly to adjourn the implementation of the 80 db(A) Truck Noise Standard for a year so that it can come into operation together with the Emission control treatment.

We would much appreciate it if you take our comment into consideration in the enforcement of the new regulation.

2. Quieted Prototype Truck

(1) Base-line Truck Configuration

Make / Model ; Hino FF174 Chassis with Cab
Engine ; Hino H07C-B 160HP / 3000 rpm
4-stroke, in-line, 6 cylinder diesel, natural
aspirated

Hino

(2) Estimated Impact on Maintenance

The noise control treatments may increase truck maintenance requirements through;

- 1) The need to remove and reinstall panels used for noise treatments
- 2) Restricted access to components requiring service

Time and motion studies indicated that enclosure panels could be removed and reinstalled in a following time.

Enclosure panels	removed (min.)	reinstalled (min.)
Engine side covers(left, right)	3	7
Rear cover	1	2
Bottom engine cover	2	3
Bottom radiator cover	1	1
Transmission side covers (left, right)	2	3
Total time	9 min.	16 min.

With our best regards,

Hino Motors, Ltd.

S. Suzuki
S. Suzuki
General Manager
Technical Division
Overseas Operations

SS/SI/mk

CC: Ms. Louise P. Giersch Director

Hino

Transmission ; 6 forward speeds, Manual

(2) Noise control Treatments of Prototype Truck

Following treatments were used to reduce the noise of baseline truck. (Please refer to the attached drawing.)

- 1) Engine Transmission Enclosure
 - Engine shelter covers under cab
 - Engine side covers (Left and Right)
 - Rear cover (with fiberglass)
 - Bottom engine cover
 - Bottom radiator cover
 - Transmission side covers
- 2) Engine treatment
 - Oilpan cover
- 3) Exhaust system treatment
 - Modification of the Muffler
 - Double shell, Enlarged volume
- 4) Cooling system treatment
 - Fan clutch
 - Larger radiator

(3) Noise level of Prototype Truck

Measurements of exterior noise levels were conducted according to the procedure described in 40CFR205.

Exterior Noise Level ; 79 db(A)

3. Impacts of Noise Control Treatments

(1) Cost and Weight Estimation

Following table presents estimates of the cost and weight of the noise control treatments applied to the prototype truck. Estimate of Increased cost is intended for customer, calculated per truck.

Treatment	Increased weight	Increased cost
1) Enclosure System	23.0 kg (51.1 lb)	\$ 618
2) Engine oilpan cover	3.5 kg (7.8 lb)	45
3) Muffler Modification	6.0 kg (13.3 lb)	32
4) Fan Clutch	2.5 kg (5.6 lb)	36
5) Radiator modification	20.0 kg (44.4 lb)	232
Total Increase	55.0 kg (122.2 lb)	\$ 963

Estimated weight increase 55.0 kg (per truck)

Estimated cost increase \$ 963 (per truck)

Noise Control Treatments

