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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

MAR 4 1981

OFFICE OF
AIR, NOISE, AND RADIATION

SUBJECT: Meeting with International Harvester on Regulatory Relief

FROM: Michael P. Walsh

TO: C. Elkins
R. Gamse
S. Harvey
D. Menotti

Gregory Dana of my staff attended a meeting today between International Harvester (IH) and Don Trilling, Director of the Office of Industry Policy at DOT. IH presented their version of a "wish list" for regulatory relief.

The attached documents were handed out at the meeting. We are reviewing these as part of our review of regulations in working with DOT. The points raised appear to be nothing new relative to the MVMA letter and other "wish lists" we have been working on. We will be happy to work with your staffs on any issued raised in these documents.

Attachments

cc: W. Barber
E. Tuerk

INTERNATIONAL HARVESTER

80 db(A) NOISE REGULATION FOR MEDIUM & HEAVY TRUCKS

BACKGROUND

E.P.A. promulgated the 80 db(A) noise regulation in 1976 as an extension of the initial 83 db (A) regulation that was effective on January 1, 1978. The 80 db(A) regulation was to be effective January 1, 1982.

On September 2, 1980, International Harvester submitted a petition for reconsideration of the 80 db(A) regulation noting that the current regulation significantly reduced vehicle noise levels to 83 db(A) or below from previously unregulated levels of 88 to 90 db(A). IH further contended that the 80 db(A) regulation could not be justified under a cost/benefit analysis. In subsequent submissions to the Administrator on October 2, November 18 and a special meeting with E.P.A. staff personnel on December 18, 1980, IH further defined the rationale that the 80 db(A) regulation was not justified and should be withdrawn.

E.P.A. ACTION

On January 19, 1981, E.P.A. Administrator, Mr Douglas Costle granted a one year deferral of the regulation from January 1, 1982, to January 1, 1983, based primarily on the current economic condition of the industry and the nation.

In the January 27, 1981 Federal Register, E.P.A. discussed the delay rationale and their reanalysis of the economic impact of the 80 db(A) regulation. In their reevaluation, E.P.A. noted the increased cost per vehicle to range from $307.00 to $876.00 with a negative annual economic impact of:

YEAR	NATIONAL ECONOMIC IMPACT
1982	$145,000,000
1983	$157,900,000
1984	$165,200,000

(1980 Constant Dollars)

IH CONTENTION

In the E.P.A. reanalysis of the regulation, the Administrator failed to adequately address the major cost/benefit issues raised by the IH petition - - - issues that IH continues to believe justify the complete withdrawal of the 80 db(A) regulation.

Since research attempts have never shown a health cause and effect relationship as a result of transportation noise, the best the 80 db(A) regulation can hope to address is an annoyance condition for a select small percentage of the populace. Attendant to this is the tremendous national economic expenditure with resultant fuel losses that are so crucial to our attempts to maximize our national fuel conservative strategies.

With the slow truck replacement rate predicted by E.P.A., the benefits of the regulation, which IH contends are minimal, will not be fully realized until sometime after the year 2000. At such time, we as a nation, will have expended over 3 billion dollars to fully achieve the E.P.A. goal. This is in view of the fact that new vehicles regulated under the 1978 standard are currently, on an average basis, within 0.3 to 0.5 db(A) of the 80 db(A) regulation.

SUPPORTIVE STATEMENTS

As a result of E.P.A.'s subjective avoidance of many of the discrete issues noted in their reanalysis of the regulation, The Motor Vehicle Manufacturers Association, Inc. have included in their letter to President Reagan, an industry recommendation for withdrawal of the 80db(A) noise standard.

Additionally in 1975, the Council on Wage and Price Stability made an analysis of the 80 db(A) regulation. Their conclusions, as follows, are perhaps much more valid today than they were in 1975. COWPS concluded, "Indications are that the noise standards should be no lower than 83 db(A). The findings of this analysis of the proposed regulation strongly indicate a lack of sufficient economic justification for the 80 db(A) level."

CONCLUDING COMMENTS

International Harvester continues to maintain that the current 83 db(A) regulation, was and continues to be,

an effective regulation toward reducing Community Noise levels. We further contend that the 80 db(A) regulation, proposed for a January 1983 implementation, should be immediately withdrawn on the basis that it is not a cost effective regulation and the benefits to society will, at best be minimal.

INTERNATIONAL HARVESTER

J. PATRICK KAINE
President,
Truck Group

March 2, 1981

The Honorable Andrew Lewis
Secretary of Transportation
400 Seventh Street, S.W.
Washington, D.C. 20590

Dear Mr. Secretary:

President Reagan has initiated a re-examination of excessively burdensome and unreasonable rules imposed on the private sector by regulatory agencies. On February 17 he signed Executive Order 12291 which, among other things, requires agencies to review all existing and proposed regulations with a major impact on the economy in terms of costs versus benefits. My understanding is that agencies are to examine carefully alternative approaches and to choose the approach yielding the greatest net benefit to society. The Executive Order instructs them to maximize the "aggregate net benefits to society, taking into account the condition of particular industries affected by regulations, the condition of the national economy, and other regulatory actions contemplated for the future."

With this mandate in mind, I would like to bring to your attention several regulations imposed or being considered that will, if carried out as planned, have a major cost impact on International Harvester Company, its customers, and ultimately the consuming public that must also absorb these increases. These regulations are:

* the 1983 model-year truck noise emission standard;

* the 1984 model year heavy-duty engine emission standards for hydrocarbons (HC) and carbon monoxide (CO);

* the 1986 model year heavy-duty particulate emission standard, and

* the 1986 model year heavy-duty oxides of nitrogen (NOx) emission standard.

The enclosed background paper covers in some detail International Harvester concerns with each of these regulations. I would like, however, to highlight several points:

1. On the noise standard, we believe the current 83 db(A) standard has sufficiently reduced community noise to acceptable levels. Truck manufacturers are already, on an average basis, within 0.3 db(A) of meeting the proposed new standard. Yet EPA itself estimates the national economic impact of the 80 db(A) standard for the first three years to be $468 million. I question whether this small additional reduction in noise is worth such a cost.

2. Concerning the 1984 emissions standards, measured by current test procedures, manufacturers have already reduced hydrocarbon emissions by 90% and carbon monoxide emissions by 79% to certify their engines in California--without using catalytic converters on gasoline engines. EPA's new and unjustified transient test procedure would, however, effectively lower the statutory emission level (90% reduction for both HC and CO) and will require--for IH alone--additional capital expenditures of $10-14 million (in 1980 dollars) for development, certification and auditing facilities. Again, when the manufacturers are so close to meeting the statutory standard, are such large expenditures necessary?

3. On top of these standards, the 1986 NOx and particulate standards will impose additional costs on heavy-duty engine manufacturers, costs that are difficult to estimate because they stem from a requirement to use technology that is either untested or nonexistent. But the cumulative impact of these standards on the cost of purchasing and operating heavy-duty trucks could have a sizeable adverse impact on the trucking industry in addition to an estimated fuel economy penalty of $11,000 over the life of a diesel-powered semi-tractor-trailer.

At a time when the trucking industry is facing the increased costs and uncertainties of deregulation, truck manufacturers are suffering from the shortage of capital caused by sales levels 30-40% below normal. Unemployment levels are increasing dramatically. The nation simply cannot afford these regulations on a cost-benefit basis. I would hope, therefore, that your review of these four rules would result in the following:

* Immediate withdrawal of the 80 db(A) noise standard and continuation of the federal truck noise standard at 83 db(a);

* Abandonment of the transient test procedure and setting of the 1984 exhaust emissions standards based on non-catalyst technology;

* Delay of the anticipated public hearings on the particulate standard until better baseline testing data is available;

* Considering the questionable additional public health benefit to be derived from overly stringent NOx and particulate standards, setting those standards at levels that do not require massive new capital expenditures by manufacturers and major price increases to our customers.

I know that you will give these matters your most serious consideration.

Sincerely yours,

Background Paper

Heavy-Duty Noise and Emissions

I. The 80 db(A) noise emission standard was promulgated by EPA in 1976. Under it, medium- and heavy-duty trucks--of which International Harvester is a leading manufacturer--may produce sound emissions no greater than 80 dB(A), compared to the current standard of 83 dB(A). Since the 80 dB(A) standard was promulgated, however, economic and market conditions have changed in ways that invalidate many of the assumptions used by EPA to justify the 80 dB(A) standard on a cost-benefit basis.

In response to a September 1980 IH petition for reconsideration of the 80 db(A) standard, on January 19, 1981, EPA Administrator Douglas Costle approved a one-year delay in the standard--to January 1, 1983. In justifying this action, Costle stressed the current depressed state of the truck manufacturing industry and the general sluggishness of the U.S. economy. However, he failed adequately to address the major cost/benefit issues raised by the IH petition--issues that we believe justify complete withdrawal of the 80 db (A) standard.

From an economic standpoint, withdrawal of the 80 db(A) standard would mean, for IH alone, a savings of about $6.5 million in tooling, engineering, manufacturing and obsolescence costs. In addition, it would obviate cost increases eventually passed on to our customers estimated by EPA itself to be $307 per vehicle for medium-duty gasoline-powered trucks, $876 (3 percent increased average price) for medium-duty diesels, $269 per vehicle for heavy-duty gasoline-powered vehicles, and $489 (1 percent increased average price) for heavy-duty diesels.

The EPA estimated the national economic impact (in constant 1980 dollars) of the 80 db(A) standard to be $145 million in 1982, $158 million in 1983, and $165 million in 1984, assuming imposition of the standard on January 1, 1982. With the slow truck replacement rate predicted by EPA, the benefits of the 80 db(A) standard will not be fully realized until after the year 2000. At such time we as a nation will have spent over three billion dollars to fully achieve the EPA goal. In addition to the negative economic factors, the fuel economy losses resulting from the less fuel-efficient quieted 80 db (A) trucks will undercut the significant gains in fuel economy being achieved through the Department of Transportation sponsored Voluntary Truck and Bus Fuel Economy Program.

On the benefit side of the ledger, research results have not demonstrated a cause and effect relationship between transportation noise exposure and public health. The 80 db(A) standard appears, instead, to be aimed at simply lessening an "annoyance" condition. Yet a sales-weighted analysis of all IH trucks produced in 1979 reveals an average sound level of 80.5 db(A), and EPA product verification data for all truck manufacturers shows an average sound level of 80.3 db(A). Thus, the actual benefit of imposing the 80 db(A) standard will be at best marginal. In light of the significant success of the 83 db (A) standard and the depressed economic condition of the industry, a high-cost standard with only minimal benefits cannot be justified.

An early administrative action on the 80 db (A) standard is critical. With reduced levels of employment necessitated by the economic condition of our nation, IH must make manpower commitments and expenditures as early as April 1981 to ensure compliance by the current mandatory date of January 1983. The sooner this decision is made by the EPA the less negative impact it will have on the industry and the economy.

II. <u>The 1984 heavy-duty engine emissions standards</u> were promulgated on January 21, 1980. Although ostensibly achieving a 90% reduction of hydrocarbons (HC) and carbon monoxide

(CO) emissions from 1969 baseline levels (as required by the Clean Air Act), the 1984 standards actually will force manufacturers to reduce emissions levels further because of additional features of the regulation that were not contemplated or required by the 1977 Clean Air Act Amendments.

These additional features include an EPA-developed transient emissions test procedure, which EPA has never proven to be a more accurate indicator of real-world emissions than the nine-mode and 13-mode steady-state tests it replaces. EPA itself estimated the cost to the industry of using the transient test procedure will be $100 million, yet General Motors has estimated its cost of compliance alone may equal that amount. IH estimates the transient test procedure will require for IH alone additional capital expenditures of $10-14 million for development, certification and auditing facilities.

It is questionable whether use of the transient cycle is necessary or justified in terms of its additional cost. Use of the transient test cycle and the mandated 90% reductions will force manufacturers to use catalytic converters on heavy-duty gasoline engines. This in turn will require truck operators to use more expensive unleaded gasoline, thus widening the operating cost differential between diesel and gasoline-powered trucks. I believe that this will reduce the demand

for heavy-duty gasoline engines to the point where it will no longer be economically feasible to continue production of gasoline engines.

At this time, the heavy-duty engine manufacturers are already close to meeting the statutory standards. Engines certified to the 1980 model year California emissions standards achieve a 90% redution of hydrocarbons and 79% reduction in carbon monoxide--without using catalytic converters.

In addition, the 1984 regulations abandon the concept of a 40% acceptable quality level for production-line emissions testing of engines, used by automobiles, and establishes a more stringent "every engine pass" concept. Yet Congress required that the standards be determined on the basis of average results from baseline engines. It follows, therefore, that compliance with the standards was intended by Congress to be on the basis of averaging. Ensuring that all production engines comply, in effect, lowers the real emission targets to much more stringent levels than the law mandates for manufacturers.

The 1984 heavy-duty emissions regulations also abandon the traditional concept of "half life" for engine useful life for certification and warranty purposes. Contrary to the

congressional intent of half life, heavy-duty engines will instead have to be warranted for an unspecified period representing their useful life to major rebuild or engine retirement. The combination of the new definition of useful life and the 10% acceptable quality level will require that essentially all trucks meet the statutory emissions levels to the point when the engine must be rebuilt or retired from service.

IH estimates the cost of building a new facility to perform the additional audit testing at $6.9 million; this does not, however, count the cost to IH of in-house auditing to assure the degree of quality required nor the additional warranty costs, which are expected to be significant.

The new transient test procedure, 10% acceptable quality level, and the new definition of useful life are administrative prerogatives, not required by the Clean Air Act, which IH believes are examples of regulatory overkill. The agency itself has stated that the benefits of the transient test cycle cannot be quantified in terms of an air quality benefit.

EPA has estimated the total cost to the nation of meeting the 1984 heavy-duty emissions standards to be $2.5 billion. General Motors has, however, estimated the total cost to the nation will exceed $5 billion. IH estimates this cost could

be reduced by three fourths by abandonment of the transient test procedure, the 10% acceptable quality level, and the new definition of useful life, and by setting the standards based on non-catalyst technology.

III. The 1986 heavy-duty engine particulate emission standard was proposed by EPA on January 7, 1981. IH engineers have still not had sufficient opportunity to analyze its effects on the company or to develop cost-of-compliance estimates. However, the analysis that has been done so far leads to some preliminary conclusions:

1. EPA has decided to set the standard at a level (0.25 grams/Brake-Horsepower-hour) that will require the use of trap oxidizers, a completely new and untested technology that is not only not currently available to heavy-duty engine manufacturers, but that may or may not turn out to be practical to use in vehicles of this type. The EPA staff has simply assumed that trap oxidizers can be developed and made to work satisfactorily in heavy-duty trucks under normal operating conditions.

2. EPA's test data used to arrive at the standard may be seriously flawed. Attempts to duplicate baseline engine emission testing results by EPA itself as well as by at least

one heavy-duty manufacturer have been unsuccessful, and in both instances the testing showed higher baseline emissions levels than the test results used by EPA to set the standard.

3. At this point, there is a question whether trap oxidizers can be developed that will not reduce the fuel economy of heavy-duty diesel engines, due to the need for high engine or trap operating temperatures to burn off the trapped particulates. Despite some potential trade-off between energy efficiency and clean air, EPA's notice of proposed rulemaking does not even mention any potential fuel economy effects of trap oxidizers. Nor does it acknowledge that an additional serious fuel economy penalty will be imposed by the suggested 4.0 grams/Brake-Horsepower NOx standard that would be promulgated for the same year.

4. There is some doubt whether control of particulates emissions from heavy-duty engines is really necessary to protect the public health. In fact, in October 1980 the National Academy of Sciences published a study that emphatically stated that no adverse health effect has been demonstrated to be caused by diesel exhaust emissions. IH believes the EPA should wait until more conclusive evidence is discovered of the public health need for control of particulates emissions before issuing an unnecessarily stringent rule that will force heavy-duty engine manufacturers and vehicle owners to commit major new sums of money.

IV. Finally, on January 19, 1981, EPA issued an advance notice of proposed rulemaking for the 1986 model year oxides of nitrogen (NOx) standard for heavy-duty engines. The Clean Air Act requires EPA to set a standard resulting in a 75% reduction in NOx emission levels from a baseline derived from testing of 1972 and 1973 model year heavy-duty gasoline engines. EPA's baseline testing resulted in a possible standard of 1.7 grams/Brake-Horsepower-hour; however, in the ANPRM, EPA admitted "it may not be technologically feasible" for heavy-duty diesel engine manufacturers to meet a 1.7 gram standard in 1986 and suggests a more feasible standard would be approximately 4.0 grams.

IH agrees that the 1.7 gram standard is not feasible for diesel engines; moreover, we believe that even a 4.0 gram standard will not prove to be cost-effective. Engineering studies done by IH and other manufacturers show that reduction of NOx emissions to this level in diesel engines will entail significant losses in fuel efficiency, approximately 10%. The cost of such a fuel penalty over the life of a diesel-powered semi-tractor-trailer, at today's diesel fuel prices, would be $11,000. This cost will be increased by increases in fuel costs that are certain to occur. Thus, the 1986 heavy-duty NOx standard will have a serious impact on efforts to reduce U.S. petroleum consumption and to control inflation.

IH questions the need for an overly stringent heavy-duty NOx standard. The National Ambient Air Quality Standard for NOx is set at a level 100 times lower than the NOx standards generally set by industrial hygienists for worker exposure in underground mines. This would suggest that the NAAQS for NOx is considerably below that needed to assure the public health. Yet even at this low level, currently only two U.S. metropolitan areas still exceed the standard (Denver and Chicago) and one of them (Denver) is close to meeting it. IH believes that EPA should set a more reasonable standard than 4.0 grams.