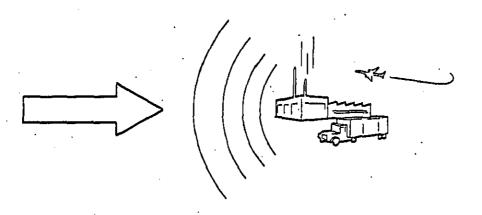
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ONAL 01-82 # 2 State & Local_ other Supporting Materials



EPA

NOISE ABATEMENT PROGRAM .STRATEGY



NOISE ABATEMENT STRATEGY PAPER

EXECUTIVE SUMMARY

This strategy paper describes EPA's plan for noise abatement over the next five years, as well as in the longer term. The background of this strategy is described and the selection of goals and priorities is explained. The step-by-step plans for implementing the goals are then detailed and the assessment of progress is discussed.

This strategy is a basic component in EPA's Formal Planning and Reporting System (FPRS). The FPRS provides the framework through which EPA determines and enunciates the major directions of its programs, selects objectives, monitors progress, and allocates resources. A preview of major issues, the broad resource parameters for Program Plans, and new initiatives will be undertaken prior to formulation of Agency budget proposals.

This strategy carries forward the basic thrusts of previous strategies. It emphasizes EPA regulatory actions in the near term, and projects expansion in the state and local sectors in future years.

It updates previous versions to meet Agency planning requirements and provides more program definition. This definitization derives from the recent development and use in the planning process of a new analytical technique, the fractional noise impact methodology. This technique enables EPA to quantitatively evaluate its progress toward the goal of reducing noise impact in the United States.

EPA's long term goal for the year 1992 is to reduce the national noise impact by 82 percent, from the present cast of 97.2 million noise impact units (equivalent population 100 percent impacted by noise) to a reduced value of 17.5 million noise impact units. In doing so the number of persons exposed nationally to L_{dn} (daynight sound levels in decibels) greater than 70 will be reduced from 42.3 million to 12.4 million. Note that the numbers cited here embody the latest projections using noise impact analysis; they supersede estimates presented in earlier strategy papers.

The legislative mandate for EPA's program is the Noise Control Act of 1972. This act empowered EPA to specify the criteria and maximum noise levels to protect the public health and welfare. It also spelled out roles in product noise regulation, labeling, technical assistance, low noise emission products, and Federal Government coordination. It called for EPA noise regulations of interstate motor and rail carriers and recommendations of regulations to FAA

concerning aviation noise. The Noise Control Act is preventive legislation to minimize the national incidence of noise-induced hearing loss, sleep loss from noise, noise interference with speech communications, and annoyance from noise.

The five-year plan contained in this strategy paper circumscribes EPA's responsibility to execute the mandate of Congress. It recognizes that administrative implementation of the law involves the exercise of broad areas of discretion and entails significant elements of policy making. It presents a framework for policy planning and decision analysis in terms of requirements, alternatives, goals, priorities, plans, and assessments. It provides a road map for reaching the ultimate aim of EPA's noise program actions—to help achieve protection of public health and welfare from noise insults. It delineates EPA's important, but limited role, focused strongly in the near term on national standards for new products distributed in commerce—standards based on available technology with cost factors required to be taken into account. It is based on the assumption that adequate resources will be allocated, i.e. a \$10 million funding level in FY 76. A significant reduction in available funds would cause a major change in forecasts and planned resource allocations.

The EPA strategy recognizes that to achieve its ultimate objective EPA must exercise leadership in making a successful partnership with State and local governments, which retain considerable authority to regulate the timing, location and other aspects of many important noise-generating activities.

In assessing how well EPA's programs are reducing the national noise impact a long-term trend monitoring program will be used. In the program EPA will perform a triennial survey, taking noise measurement data from State and local governments, FAA, OSHA, HUD, FHWA, and the Bureau of Motor Carrier Safety. From these measurements a national noise impact will be computed every three years and appropriately publicized. The decrease of the national noise impact over the years will be evidence of the success of EPA's noise abatement strategy.

II. GOALS

The general goal of the noise abatement program of the Environmental Protection Agency is to reduce the impact of noise pollution in the United States. As mandated by the Noise Control Act, the efforts of EPA are directed toward preventive action to minimize the national incidence of:

- . Noise-induced hearing loss
- . Sleep loss from noise
- . Noise interference with speech communication
- . Annoyance from noise.

The measure which has been chosen by EPA to measure cumulative noise levels is L_{dn} , the day-night noise level measured in decibels. The value of L_{dn} represents a power average of A-weighted decibel measurements over time, with the averaging process weighted to emphasize noise that occurs during the night. The A-weighted decibel is the unit of sound level which is measured by an ordinary sound level meter, approximating the response of the human ear.

To determine the severity of the noise problem in various noise exposure conditions EPA uses the fractional noise impact methodology

described in Chapter I. This indicator takes into account the levels of environmental noise identified by EPA as requisite to protect public health and welfare with an adequate margin of safety. It also takes into account the number of persons affected and whether the noise environments involve annoyance or direct risk of hearing damage. The total impact is measured in noise impact units, which represents the number of persons 100 percent impacted by noise.

In 1974 the national noise impact was estimated to be 97.2 million noise impact units as shown in Table II-1. Assuming that population increases by 0.7 percent per year and that the population density in urban areas increases, the national noise impact projected for the year 1992 would be 111.8 million noise impact units if no noise reduction measures are taken. With the implementation of the national noise abatement program to be described here, the national noise impact will instead be reduced to 17.5 million noise impact units by 1992.

It is the general goal of EPA to minimize the national noise impact in a way which is consistent with other related goals such as recognition of individual freedom, minimizing cost, increasing national productivity, minimizing energy consumption, and promoting rational land use.

Table II-1
Summary of Noise Impact in the United States by Category

	Cumulati	Cumulative Number of People Whose Exposure Exceeds Indicated \mathbf{L}_{dn} (Millions)									1992
	45dB	50dB	55dB	60dB		40dB	75dB	80dB	85dB (1975 Noise Impact millions of no	Noise Impact oise impact un
Urban Traffic		,	93.4	59.0	24.3	6.9	1.3	0.1	0	34.6	5.9
Home Appliances	79.7	. 44.2	17.1	4.4	. 6	0	0,	0	0	26.5"	3.9
Aircraft Operations	•		24.5	16.0	7.5	3.4	1.5	0.2	O	10.2	2.5
Industrial						16.7	12.2	0.6	3.8	8.2	2.3
Construction			26.2	8.7	2.4	. 5	0	0	0	6.2.	. 49
Freeway Traffic			13.7	8.1	4.5	2.3	1.0	0.3	0	5.8	1.7
Operators/Passengers						11.5	11.5	1.6	1.6	5.1	.7
Rail Line Operations			2.0	0.9	0.3	0 ,	. 0	0	0	. 55	.044
									Total Imp	act 97.2	17.5

NOISE REDUCTION GOALS

EPA's long-term goals for 1992 can be stated both in terms of noise impact reduction and in terms of reduction of exposure of the population.

(1) Noise Impacts and Population Exposure

The long-term goal of EPA is to reduce the national noise impacts in each of the eight categories by the year 1992. In accomplishing the noise impact reductions, EPA will also be reducing the total number of persons exposed to noise, whose exposure is above those levels specified in the Levels Document. The present national exposure of the population to noise is shown graphically in Figure II-1. The projected reductions in noise impacts and population exposure for the eight categories are as follows:

Noise impact from aircraft operations will be reduced from 10.2 million noise impact units to 2.5 million noise impact units. The number of persons exposed to noise from aircraft operations above 55 L_{dn} will be reduced from 24.5 million to 8.6 million.

FIGURE II-1 Exposure to Noise of the U.S. Population

MILLIONS OF PEOPLE 100 **URBAN TRAFFIC** HOME APPLIANCES AIRCRAFT OPERATIONS INDUSTRIAL CONSTRUCTION FREEWAY TRAFFIC L_{dn} RANGE (db) 60-64 OPERATORS/PASSENGERS 45:49 75.79 50-54 ZZZ 65-69 图 80-84 RAIL LINE OPERATIONS 55-59 70-74 85 AND OVER

Noise impact from urban motor vehicle traffic will be reduced from 34.6 million noise impact units to 5.9 million noise impact units. The number of persons exposed to urban motor vehicle traffic noise above 55 L_{dn} will be reduced from 93.4 million to 27.9 million.

- Noise impact from motor vehicle traffic in areas adjoining highways will be reduced from 5.1 million noise impact units to 1.7 million noise impact units. The number of persons exposed to highway traffic noise above 55 $L_{\rm dn}$ will be reduced from 13.7 million to 5.2 million.
- Noise impact from construction equipment will be reduced from 6.2 million noise impact units to .49 million noise impact units. The number of persons exposed to construction noise above 55 L_{dn} will be reduced from 26.2 million to 2.8 million.
- Noise impact from trains in areas adjoining rail lines will be reduced from .55 million noise impact units to .044 million noise impact units. The number

of persons exposed to noise from rail line operations above 55 L will be reduced from 2.0 million to .3 million.

- Noise impact from machinery in the work place and in areas adjoining industrial sites will be reduced from 8.2 million noise impact units to 2.3 million noise impact units. The number of persons exposed to industrial noise above 70 L_{dn} will be reduced from 16.7 million to 9.9 million.
- Noise impact from home appliances will be reduced from 26.5 million noise impact units to 3.9 million noise impact units. The number of persons exposed to home appliance noise above 45 L_{dn} will be reduced from 79.7 million to 19.7 million.
 - Noise impact from vehicles and equipment to which operators and passengers are subjected will be reduced from 5.1 million noise impact units to 0.7 million noise impact units. The number of operators of equipment and passengers of motor vehicles exposed to noise above 70 L_{dn} will be reduced from 11.5 million to 1.8 million.

Some people are exposed to noise from more than one of the above sources; for instance, people who are exposed to both factory noise at work and urban traffic noise in their homes. In these cases there is a cumulative impact.

(2) Noise Reduction Methods

EPA will accomplish these noise reductions through the following methods:

- Promulgating and enforcing regulations on maximum permissible noise levels
- Labeling products and providing information to the public
- . Cooperating with State and local governments in the development and enforcement of their noise programs
 - Coordinating Federal noise programs and research.

By 1992 the following events will have taken place:

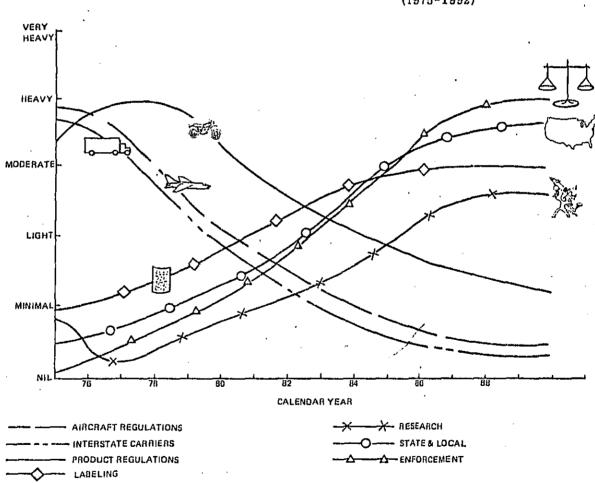
EPA will have identified all the major sources of noise and issued appropriate regulations on them.

- Some of the regulations issued by EPA will contain provisions for reduction of noise level ceilings over time. By the year 1992 these de-escalations will have gone into effect and the regulated noise ceilings will be at their low, long-term steady-state values.
- Almost all of the old noisy units manufactured before regulation will have been retired.
- The activities of EPA will have changed to enforcement; leadership in providing technical assistance and support to State and local programs, coordination, research, and improvements in those regulations promulgated as advances in technology become available.

The planned evolution of EPA's noise abatement program activities over time is shown in Figure II-2.

This display provides a capsule illustration of the Agency's strategy for carrying out its responsibilities under the mandate of the Noise Control Act. It shows projected relative resource commitments for various EPA activities during the 1975-1992 time frame. Near-term emphasis on aviation, interstate carrier,

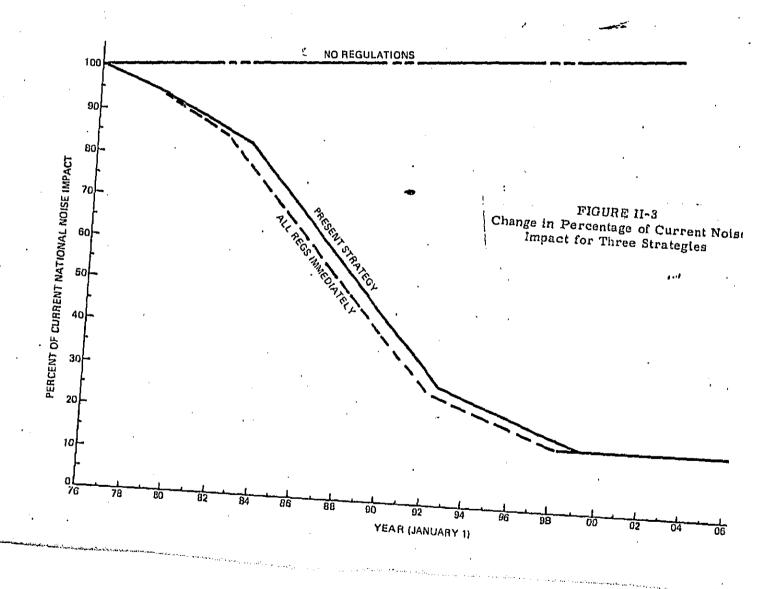
FIGURE II-2
Relative Resource Commitment
(1975-1992)



and new product regulations shifts in the long term to emphasis on enforcement, State and local activities, labeling, and research.

As shown in Figure II-3, the national noise impact tends to level out in the long-term at the same value regardless of whether product noise regulations are introduced by the plan described here or whether all regulations are introduced immediately. The reason that the alternatives shown have almost the same effect in the long run is that when the product life cycle factor and time required to retire old noisy product units are taken into account, the differences in initial phasing are washed out. Thus EPA's present plan for phasing in product noise regulations has almost the same effect as issuing all regulations at once, but the present plan is more realistic in its demands on EPA's resources.

The residual noise impact shown for the 1998-post 2000 time period is projected to be primarily from transportation noise sources. The feasibility of driving noise impact lower depends on research results and technological breakthroughs in advancing the state-of-the-art.



The near-term goal of EPA is to reduce the impact of noise as quickly as possible, with due regard to other national objectives such as recognizing individual freedom, minimization of cost and economic impacts, increasing productivity, conserving energy, and promoting rational land use.

2. RELATED GOALS

Related to EPA's noise reduction goals are other goals which are sometimes complementary and sometimes conflicting. These goals include the following:

(1) Recognition of Individual Freedom

It is the American principle of government that a person is allowed freedom up to the point where he infringes on someone else's freedom. This is certainly the case in the Noise Control Act of 1972, the source of EPA's statutory authority. People are permitted to manufacture and operate sources of noise only up to the point where they infringe on someone else's freedom—by destroying his hearing, robbing him of sleep, or preventing him from using his property through annoyance or speech interference. Because this line needed to be drawn between the rights of the person responsible for the noise and the rights of the person hearing the noise, EPA took great care

in determining the levels presented in the Levels Document.

These levels were chosen to protect public health and welfare with adequate margins of safety.

A related issue is that of voluntary exposure to very loud noise, such as target shooting and loud music, which sometimes creates a hearing loss problem. EPA plans appropriate educational programs to inform the public of this danger and thus reduce the incidence of such hearing loss.

(2) Minimization of Cost

EPA plans include requirements for extensive cost-benefit studies and analyses to assure that the benefits to be derived outweigh the costs. A near-term objective is to develop better techniques for cost-benefit analyses for assessing the benefits of noise control as compared with the costs to society of no control, and the costs to industry and society of applying control measures. A continuing objective is to assure effective application of cost-benefit analyses in all program actions to facilitate accurate decision analysis.

(3) Increasing Productivity

 Technological opportunities will be explored by EPA in its projected machinery noise research program to provide noise control techniques that can increase productivity, both in terms of the production processes and the worker. Decreasing noise can increase productivity by leading to better employee morale, improved communication, and a safer, healthier working environment. Tradeoffs between process speed and quieting will be considered when they occur.

(4) Conserving Energy

Opportunities for energy savings in conjunction with noise control reduction will be explored. Noise reduction and energy conservation can go hand in hand. For example, air conditioners with larger housings and bigger fans are more efficient as well as quieter, and building walls with thicker insulation conserves heating oil as well as insulates against noise. There are also cases where tradeoffs exist between quieting and energy efficiency; these will be thoroughly examined.

(5) Promoting Rational Land Use

This is a related goal which goes with reduction of the noise impact. If noise-sensitive uses such as residences can be discouraged near airports, heavily traveled roads, and rail lines, then the population densities in these areas will decrease and the noise impact will be reduced.

(6) Interrelation of Environmental Objectives

The objective of reducing noise pollution is related to other environmental goals such as reducing air pollution.

Such intermedia effects will be investigated by EPA in the preparation of environmental impact statements as part of its noise regulation actions.

3. ALTERNATIVES

As was true in previous noise abatement program strategies, possible alternatives for EPA actions involve consideration of various degrees of emphasis in terms of resource commitments, relative to the activities displayed in Figure II-2. The possible alternatives include:

(1) Concentrate primarily on developing Federal new product regulations and revisions to interstate carrier regulations.

Continue other activities at a relatively low commitment of EPA resources. This alternative relies on Federal product regulations and available technology to reduce national noise impact. It involves risk of very limited State and local involvement as well as loss of public information and technological opportunities.

- (2) Continue development of Federal new product regulations, revisions to interstate carrier regulations, and labeling regulations at an accelerated pace. Continue other activities at a relatively low level. This alternative broadens the scope of regulatory action, but it still involves the risk of very limited State and local involvement, etc.
- (3) Stretch out planned regulatory actions for new product regulations, revisions to interstate carrier regulations, and labeling. Shift significant resources and effort to activities related to providing Federal leadership to State and local programs, coordination, and research.

 This alternative gets State and local programs going. It involves shifting of resources.
- (4) Continue Federal regulatory actions at accelerated pace (new product regulations, interstate carrier regulations, labeling). Starting in FY77, move out on an expanded program in other activities (Federal leadership for strong State and local programs, coordination, and research).

 Plan for phasing in increasing Federal resources in these activities in future years. This alternative gets the total job done faster. It plugs gaps in present program and maintains Federal regulatory action at accelerated pace.

It phases in complementary State and local actions and research needed to retain the effectiveness of Federal regulatory action and gets national noise impact reduced faster. It meets the full intent of legislated mandates. It requires an increase in resources above FY76 level for technical assistance to State and local agencies and research. This is the alternative delineated in this 1976-1981 five-year plan. Major reduction in funding for the noise program, which is very sensitive to availability of resources, would result in delays and would require consideration of other of the above mentioned alternatives.

This chapter has stated EPA's noise abatement goals. The next chapter describes the priorities which must be set among EPA's programs to reach these goals.

FY 1975 Objectives & Accomplishments

PRODUCT REGULATION ACTIONS

COMPLETED IN FY 1975

- Published proposed rail carrier regulations (July 3, 1974)
- Promulgated final motor carrier regulations (October 29, 1974)
 - Published proposed new medium and heavy duty truck regulations (October 30,1974)
- Published proposed new portable air compressor regulations (October 29, 1974)

OBJECTIVES AND ACCOMPLISHMENTS

FY 1975

I. The following is a list of FY 1975 objectives reflected in the May 6, 1974, "FY 1975 Program Plan" and the November 14, 1974 "Program Reporting Requirements" with statements of related accomplishments to date.

PROBLEM DEFINITION AND ENVIRONMENTAL ASSESSMENT

Objective - Prepare regulatory strategy document.

- Accomplishment Second draft completed and reviewed by DAA.

 Third draft in preparation.
- Objective Report to Congress on present Federal research and control programs.
- Accomplishment To OMB 4/17. Start Red Border Clearance 4/21.
- Objective Report on Research requirements.
- Accomplishment Aviation Noise Control Requirements Study. Research Panel Reports in Periodic Report.
- Objective Second major noise source identification report
- Accomplishment Interagency review period ended 4/11. ONAC analysis of DOT and GSA comments submitted to AA 4/17.
- Objective Report on noise programs in States and in cities over 75,000 population.
- Accomplishment Draft complete. Being reviewed for publication by June 30, 1975.

TECHNICAL ASSISTANCE/STATE AND LOCAL PROGRAMS/COORDINATION

- Objective Adoption of EPA model city and county ordinance by

 National League of Cities and National Institute of

 Municipal Law Officers (NIMLO)
- Accomplishment Model ordinance has been completed and is currently
 in the interagency review process and will be submitted to
 NIMLO by May 1, 1975, with a NIMLO target publication
 date of May 15, 1975. NIMLO has been apprised on a
 step-by-step basis and has seen the current draft.
- Objective Regional guidance for increasing number of state and local programs having motor vehicle and construction equipment use and operation standards.
- Accomplishment A cooperative compliance program for the interstate

 motor carrier regulations will be initiated soon. Pending AA

 approval. Guidance in other areas will be accomplished in FY 76.
- Objective Guidelines for training state and local personnel.

 Accomplishment Will be sent to the printer within the next two

 weeks. Publication will occur within two weeks after the

 printer receives it.
- Objective Guidelines for developing local noise programs
 (Community Noise Workbook)
- Accomplishment Guidelines are being drafted by Region VIII.

 (Project initiated by Region VIII.)

<u>Objectives</u> - Guidelines for compliance with Executive Order 11752. <u>Accomplishment</u> - Published.

Objective - Memorandum of Understanding with Consumer Product
Safety Commission on Agency Responsibilities

Accomplishment - Draft memorandum by EPA sent to CPSC in December
1974. EPA is awaiting CPSC's comments.

Objective - Initiate operation of an environmental noise monitoring data assessment system.

Accomplishment - Contract procurement action underway

EPA REGULATORY ACTIONS

Objective - 9 Aircraft/Airport Regs to FAA.

Accomplishment - Four aircraft regulations proposed to FAA: minimum altitude, propeller driven small aircraft, retrofit/ fleet noise level requirements, civil supersonic airplanes. The additional aircraft regulations will be proposed by June 30, 1975. The airport regulation is projected to be proposed in early FY 1976; the airport pilot project is currently underway.

Objective - Interstate Rail Carrier

Accomplishment - Anticipate promulgation of final regulations in May 1975.

- Objective New Medium and Heavy Duty Truck regulations to be published in final form.
- Accomplishment Proposed noise emission standards for new medium and heavy duty trucks were published in the <u>Federal</u>

 <u>Register</u> in November 1974. Final regulations will be published no later than June 30, 1975.
- Objective Protable Air Compressors Emission Standards in final form.
- Accomplishment Published proposed regulation November 1974.

 Final regulations will be published no later than

 June 30, 1975.
- II. The following is a list of actions initiated in FY 1975 for completion in later years—(FY 1976 1978), as reflected in the November 14, 1974, "Program Reporting Requirements". The list includes the planned action and the status of each action in the developmental stage.
- Action Automobile and Light Truck Reg
- Status FY 1975 program plan projected technology study contract award 3rd quarter FY 1975. Now project one month slip to 4th quarter FY 1975, and initiation of additional studies in FY 1976.

Action - Motorcycle Reg and/or Labeling

<u>Status</u> - FY 1975 plan showed ANPRM in FY 75. ANPRM now projected for 1st quarter FY 76. To be identified in second 5(b)(1) report 4/30.

Action - Bus Reg

<u>Status</u> - FY 75 showed award technology contract 4th quarter, FY 75.

On schedule. Identified 4/30.

Action - Interstate Motor Carrier Reg Revision

Status - On schedule. NPRM 4th Quarter, FY 76.

Action - Tire Reg and/or Labeling

Status - Planned identification for regulation by end of 2nd quarter, FY 1976. NPRM now scheduled for 3rd quarter, FY 1977. FY 75 plan showed NPRM 2nd quarter, FY 1977.

Action - Exhaust System Labeling

Status - FY 75 plan said NPRM in FY 76. Now included in overall labeling program definition studies. Future plans depend on results of these studies.

Action - Pneumatic Tools Reg

Status - Planned identification for regulation 4th quarter, FY 76.
FY 75 plan said NPRM FY 77. Now say NPRM 1st quarter,
FY 78.

Action - Internal Combustion Engine Powered Equipment Labeling

Status - Deleted. Included in product actions. FY 75 plan said award technology study contract in FY 76, NPRM FY 77.

This item has been deleted from the program. To be included in other product actions.

Action - Snowmobile, Motorboat, Lawnmower Equipment and Chain Saws

Status - FY 75 plan said NPRM in FY 76. Latest plans for NPRM are

1st quarter, FY 78. Planned identification for regulation
and/or labeling 4th quarter, FY 76.

Action - Home Shop Tools

Status - FY 75 plan said NPRM in FY 77. Now included in plan for labeling of household appliances - pre-selection studies projected by FY 77.

Action - Hearing Protectors

Status - FY 75 plan said ANFRM in 1975 - on schedule (ANFRM published in 12/74); and NPRM in FY 76. Current plan is NPRM by 9/15/75, and NRM 1/76.

Summary of Aviation Noise Control Requirements & Technology Staff

Commitments and Outputs - FY 75

- Prepared report on "Civil Aviation Studies and Interagency Coordinating Organizations" - EPA 550/9-74-019A dated December 1974
- o Prepared report on "Information on FAA Certification of Aircraft" dated January 31, 1975
- o Prepared and submitted Action Memorandum to AW on "Coordination of Federally Supported Noise Research" dated December 3, 1974
- o Prepared special study reports on airport operations
 - o O'Hare airport study results presented to Congressman S. H. Young in Strelow letter dated October 30, 1974
 - Kennedy airport study preliminaries results presented to Congressman J. W. Wydler in Strelow letter dated March 28, 1975. Draft final report being reviewed and will be published during May 1975.
- o Prepared report on "National Measure of Aircraft Noise Impact Through the Year 2000" dated April 1975

FY 1976 Key Actions

FY 1976 Key Actions

EPA REGULATORY ACTIONS

- After promulgating standards for portable air compressors (FY 75-4th Q) coordinate enforcement strategies with OEGC, and other Federal, State and local governments.
- After promulgating standards for Medium/Feavy Duty Trucks
 (FY 75-4th Q) coordinate enforcement strategies with OEGC,
 and other Federal. State and local governments.
- . Promulgate and revise Motor Carrier Regulations
- . Promulgate and Revise Interstate Rail Carrier Regulations
- Complete technical evaluations necessary to promulgating a regulation on labeling of hearing protectors, continue labeling program definitions studies.
- Work on regulations for the major sources of noise identifed in the 4th Quarter of FY 1975.
 - . Wheel and Track Dozers
 - . Wheel and Track Loaders
 - . Truck Mounted Refrigeration Units
 - . Truck Mounted Solid Waste Compactors
 - . Motorcycles
 - . Buses
- . Identify as major sources of noise (Section 5b) in the 2nd Quarter of FY 1976

- . Automobiles
- . Light Trucks
- . Tires
- Identify as major sources of noise (Sec. 5b) in the 4th Q, FY 1976 . Pneumatic and Hydraulic Tools
- . Snowmobiles
- . Motor Boats
- . Chain Saws
- . Lawn Care Equipment
- . Pile Drivers
- Complete proposals to FAA of all Airport/Aircraft noise regulations by the first quarter of FY 1976.
- . Follow up proposals of Airport/Aircraft regulations with necessary support in public hearings.

STRATEGY DEVELOPMENT . Prepare Strategy Study in FY 1975 and revise in FY 1976.

- . Conduct Pre-selection studies on industrial equipment and machinery, construction equipment, household appliances, aircraft equipment, electrical and electronic equipment.
- Develop technology, economics and health affects research requirements.

TECHNICAL ASSISTANCE/STATE AND LOCAL PROGRAMS/COORDINATION . Increase the number of State and local governments having noise legislation.

Publish report on effectiveness of currently planned aviation regulations including benefits of future technology to meet health and welfare needs.

- Develop and issue technical guidelines for assessment of noise abatement projects under E.O. 11752.
- . Continue to evaluate labeling requirements for Section 6 regulated products.
- . Expand public information efforts
- . Guide and assist Regions
 - . In developing baseline data for program effectiveness evaluations
 - . developing specific source noise emission data for standard setting
 - increasing the number of State and local governments having noise legislation
 - developing program competence of State and local governments.
- . Coordinate Federal agency programs under Section 4 of the Noise Control Act and as required by NEPA and E.O. 11752.
- . Assist State and local governments in Portable air compressors "in-use" regulation through Regional Offices
- Through guidance of Regional Offices, establish liaison
 with Regional DOT officials on enforcement of Interstate
 Motor Carrier Regulations and Rail Carrier Regulations
- . Assist State and local governments on new truck "in-use" regulations.
- . Complete CNRP action and evaluate effectiveness

KEY DECISIONS WHICH WILL AFFECT FY 76 PLANS

- o Effects of emphasis on Contract support because of limited manpower resources
 - o Delays because of workload of technical evaluations for RFP's
 - o Ties up key manpower
 - o Extensive contract management required .
- o Pressure for overall average grade reduction contrasted to requirement of small staff to have higher average grade needs
- Agency decision in reassigning responsibility for coordination of Federal agencies research, development and demonstration programs with ONAC
 - o If ONAC does not get responsibility the Aviation Moise Control Requirements and Technology Staff (ANCRS) will be disbanded and personnel reassigned.
 - o If ONAC is assigned responsibility, ANCRS will be reorganized along the lines present in the December 3, 1974, Action Memorandum; meetings of the Interagency Research Panels will be immediately initiated and specific assignments made to support planned regulatory actions.
- o Continuing Resolution What will be the effect on Contract commitments. Under EPA policy, commitments (not only obligations) will have to be limited in first quarter to level of Continuing Resolution. This could cause problems in eventually getting all FY 1976 contract funds obligated thereby affecting future outputs.

FY 1977 Follow-ons

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1977 FOLLOW-ON ACTIONS

EPA REGULATORY ACTION

- . Promulgate NPRM's and NRM's for
 - . Wheel and Track Dozers
 - . Wheel and Track Loaders
- . Promulgate NPRM's for
 - . Motorcycles
 - . Automobiles
 - . Light Trucks
 - . Buses
 - . Tires
 - . Truck Mounted Refrigeration Units
 - . Truck Mounted Solid Waste Compactors
- Promulgate labeling regulations for six products for which standards have been set.
- . Conduct pre-selection studies for Household Products and initiate ANPRM.
- . Promulgate NRM for labeling hearing protectors.

TECHNICAL ASSISTANCE/STATE AND LOCAL PROGRAMS/COORDINATION

 Initiate national noise monitoring of selected sites for continuing assessment of effectiveness of Federal regulations and local noise laws.

- Update data and info on State and local governments noise control programs
- Identify target States and local governments for noise control legislation
- . Conduct noise measurement seminars and update training guides
- Update MOU's with DOT, CPSC possibly add other agencies
- . Assess EIS's and E.O. 11752 Reports
- Update review guidelines for EIS's and 11752 reports
- Provide Regions with Briefing Book and in-use measurement techniques manual for States and local governments regarding PAC and new truck standards
- . Continue LNEP criteria development and certification
- . Update model State law, Community Ordinance, and building code
- . Continue public information efforts
- Initiate 3rd Report to Congress on Federal Noise Programs

Issues

-

ISSUES

- .(Issues requiring action memos and Issue Papers will be submitted on schedule)
 - o Need resolution of EPA organizational location of Noise R & D. (Revised Draft Action Memorandum was submitted to AA 12/3/74.
 - Development of a future policy on EPA's suggested interim standard
 of 85 dBA to OSHA.
 - o Assessment of health and welfare benefits (E.I.S. and I.I.S.) effect on maintaining regulatory schedules - added reviews (interagency hearings, etc.)
 - What action should be taken by EPA to support State and local governments' requirements to implement and/or expand noise control programs which are critical to supplement Federal regulatory activities?
 - o What type of a national environmental noise surveillance and assessment system should be implemented by EPA to adequately monitor the impact of Federally regulated products and State and local control efforts on public health and welfare? This includes site selection measurement methodology, and socioeconomic parameters.
 - o What strategy and accompanying methodology must be implemented by EPA to effectively satisfy ONAC goals and the legislative intent of the Low Noise Fmission Products provision of the NCA '72? (This is currently being developed by S&R and TA&O Divisions.)

What would be the effect of the reduction in EPA noise program funding, as proposed by the Senate Public Works Committee?

The 5 million dollar funding reduction recommended by the Senate Public Works Committee from the level proposed by EPA and approved as part of the President's budget by OMB, will have an overall general result of delaying the reductions in urban noise lievels which are achievable by application of current technology. These delays will be on the order of a minimum of four years and could be as much as nine to ten years beyond the present estimates.

Our current plans provide for reducing the number of persons impacted by noise from the present approximately 100 million to 50 million by 1983, and to less than 17 million by ten years thereafter. Perhaps more important will be the fact that the beginning of these decreases will be delayed from the 1977-78 time period into the early 1980s. We have a graphic representation of this (Figure 1) which we submit for the record. Also, for the record, there is provided a summary of the present noise impacts in the United States and our 1990 estimate, assuming our present regulatory plan and funding proposals are maintained.

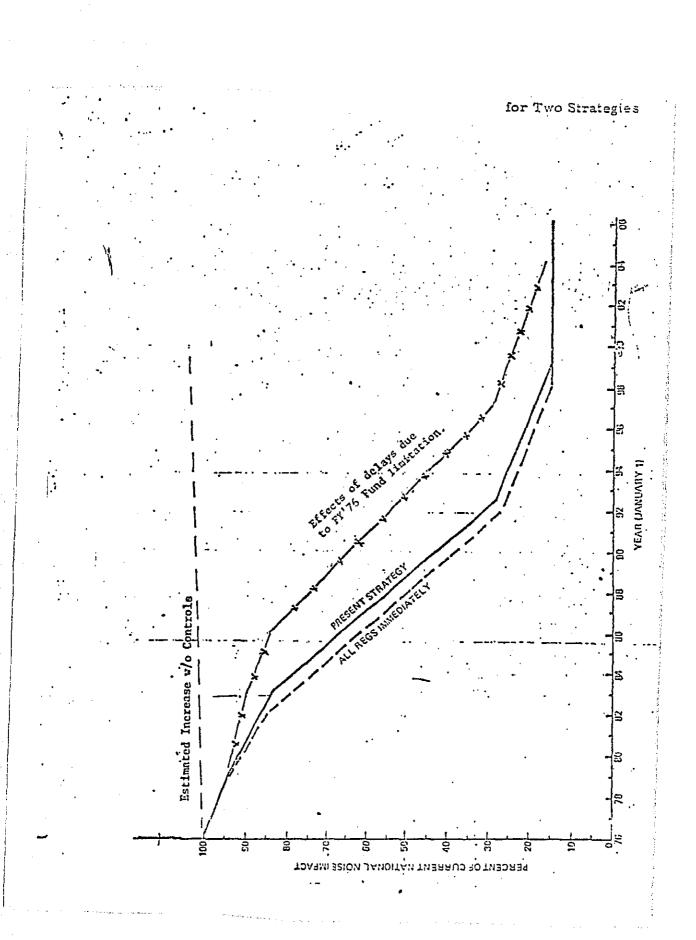
As far as specific activities planned for FY'77 are concerned, the reduction would result in our not being able to continue the present proposed regulatory program. We will have to delay until later fiscal years the presently scheduled third and fourth series of product identifications, which initiate the 24-months regulatory cycle. In effect, this means that noise control regulation actions for automobiles, light trucks, tires, pneumatic and hydraulic tools, snowmobiles, motor boats, chain saws, lawn care equipment, and pile driving construction equipment, will be deferred.

These deferrals will be necessary because of the non-availability of funds to undertake the necessary technology and economic studies to build upon the limited data base we now have. The exact number and timing of initiation of follow-on actions for these items would of necessity be dictated by the subsequently available funding appropriated in future fiscal years. If this is not the case and further reductions were to occur, then, of course, the scheduled changes cited above would be even more adverse. We have prepared a table showing the major work currently in progress, and that scheduled under our plans, which shows the impact of the proposed reduction (Table II) which is provided for the record.

(continued)

Although as indicated above, the major impact will be on funding related to regulatory activities, there is another major area of reduction in scope of efforts. There will be significant reductions in ability of the Agency to work with State and local governments in the development of noise control programs and activities. A major portion of the responsibility for noise control still rests with State and local governments. The proposed reduction in manpower authorizations will be at the extent of the Regional office operations of the Agency, which is designed to fulfill the mandate of the Congress of the Noise Control Act to provide technical assistance and support in this area.

We, of course, can submit more details.



Summary of Noise Impact in the United States by Category

	Cumul	itiya Numb	er of Pec	ple Whos	е Ехроич	re Exce	da Indicat	ed L _{dn}	(Millions)		1074	
	49dD 	50413	55411	60413	65an -	70dB	76dB	tiboo.	05dB	(m(11	Noise Impact Iona of no	Not tuga taa int
Urban Traille	, • ;·	, 1	03.4	50, 0	24, 3	,0.0	1.3	0.1	٥ ,	•	34.0	S. 1
Iome Appliances & Equipment	70.7	44, 2	17.1	4, 4	0	0	, Q 1	. 0	' 0		20, 5	3. (
Aircraft Operations		ŧ	24, 5	10,0	7.6	3, 4	1.5	. 0, 2	. 0		10,2	2, 1
nduatrial	i	.1 "		•	,	10.7	12,2	0,0	ე. გ		0, 2	3. 3
Construction			20,2	0, 7	2, 4	. 3	0 •	0	' 0		ũ. 2	
reeway Traffic	1		13,7	0,1	4.5	2, 3	1.0	0.3	0	•	a. a	1.7
Operatorn/Pagnengera	•	•		i	•	11.5	11.5	1,0	1.0		5.1	. 7
tail Line Operations	• •		2.0	0,0.	0,3	0	ò	٥	0		. 55	
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Principal Impact of Senate Public Works Recommendations FY'76 Plans - EPA - Noise Program*

Regulations.

	•
Present Plans	Impact
In Progress	•
Med./Heavy Duty Truck Reg	nc
Rail Reg	nc .
Revision Interstate Motor Reg	1-2 yr. delay
Airport Reg Proposal	nc .
Aircraft Reg Proposal	ne
2nd Product Ident. Publ. FR	ne .
Contract Support - 2nd Product Regs	Reduce
Labeling Reg Davelop - Protectors .	ne
FY 76 Proposals	
Motorcylce Reg	. 3 months delay
Bus Reg	ne
Loader-Dozer Regs	nc .
Truck Mtd. Equit. Regs	ne
Ident. Automobiles, State Regs	2 year delay
Ident. Light Trucks, State Reg	18 months delay
Ident. Tires, State Reg	2 year delay
Ident. Rapid Rail, State Reg.	<pre>2 year delay</pre>
Ident. Specialty Trucks, State Reg.	l year delay
Ident. Snowmobiles, State Reg.	1 year delay
Ident. Motorboats, State Reg.	2 year delay
Ident. Lawn Care Equipment, State Reg.	18 months delay
Ident. Pnuem. Tools	18 months delay
Pre-selection Studies, Household	-
and Industrial Equipment	. 2 year delay
Labeling Regs, Household Products	2 year delay
Other Activities	•
Orner veriatries	•
Review Fed. Agencies Plans and Facilities	Eliminate '
Institute Noise Monitoring	Delay 1 year
Participate w/States - Noise Law Develop.	Reduce

Delay 18 months Delay 1-2 years

Provide States w/Data Support Develop Regional Support Capability

^{*}Assume Funds will be restored at 10.2 million level in FY'77. If not, impact is more severe.

o. What alternatives appear feasible to continue the work on new product regulations; rather than delaying identifications on new ones until work is completed on those few which funding is available in FY'76 under the reduced level of \$5.2 million?

An alternative that has not been fully addressed, but which is feasible is to reduce the level of support for some of the cost and technology data for some of the products currently in the process of identification a publication in FR--in a few weeks. This would allow for partial funding of some of the products we have tentatively selected for our third and fourth rounds of identifications. Work would begin on a . number of products and ongoing information collection and analysis be effected which would permit a continuum of regulatory actions over an extended period of time. This would mean however, that a very few products would be identified in each 5bl identification report, perhaps no more than one or two, and that such reports would be issued perhaps annually for some time into the future. With this alternative all regulatory actions would be delayed, since contract dollars and professional staff would be applied to a broader range of products.

This alternative has one major advantage and that is that a continuous effort would be applied to a number of different products as data collection and analysis continues across a broad front, rather than addressing a few products intensively

and once those regulations are promulgated starting on new regulations essentially from scratch.

It has two major disadvantages. First, by in effect piecemealing the Agency effort over a broad front very few products
will be identified in any 5bl report and there will be considerable time between the issuance of such reports. Second,
the extended time from origination of data collection on a given
product until final regulations are promulgated on that product
would be so extensive (2-1/2 to 4 years) that the original
information collected would likely be stale, particularly in
terms of cost and economic assessments, and accordingly, would
have to be revalidated before regulations could be proposed
and promulgated which would be perhaps less cost effective than
the primary course of action which the Agency has considered
adopting should such a budget reduction occur.

An estimate of delay and promulgating regulations under this alternative would be as follows:

No delay in the new truck or air compressor regulations

Three to nine months delay in regulations for --motorcycles, snowmobiles, automobiles, dozers, and loaders and power drivers.

One year to 21 months delay in the pneumatic and hydraulic tools, speciality trucks, house-hold equipment, rapid rail transit and long carry equipment.

Over two years' delay in tires, motor boats, buses, and light trucks.

I would like to add that this is a planning list only, the products may change but delays in schedule are typical.