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EPA NOISE CONTROL  
PROGRAM  
PROGRESS TO DATE



March 1974

U.S. Environmental Protection Agency  
Washington, D.C. 20460

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## INTRODUCTION

This booklet describes the progress EPA has made to date in accomplishing the mandated requirements of the Noise Control Act of 1972. The Act sets as its goal the promotion of an environment for all Americans free from noise jeopardizing their health and welfare. Also included in this booklet are EPA plans for future actions. The information is presented in a section-by-section format for ease of reference.

Included at the back of the booklet is a listing, by subject area, of all available EPA publications along with the information necessary to obtain copies. Also, a mailing list application is included as the centerfold. If you would like to receive EPA noise documents in the future, tear the form out carefully, fill it in and drop it in the mail.

One document that may be of particular interest is the National Noise Abatement Strategy. The document was drafted by EPA as a guide to a coordinated national program utilizing the talents and authorities of all segments of society to achieve a quieter America. For copies and for more specific program information write:

Office of Noise Abatement and Control (AW471)  
U.S. Environmental Protection Agency  
Washington, D.C. 20460

You may also contact the EPA Noise representative in your nearest EPA regional office. A list of their names and addresses is provided.

Charles L. Elkins  
Deputy Assistant Administrator for  
Noise Control Programs

## **SECTION 4—FEDERAL PROGRAMS**

### **Federal Facility Compliance with State and Local Noise Laws**

Under this Section of the Act, each Federal agency is required to comply with Federal, State, interstate, and local noise control requirements.

EPA has taken actions to ensure such compliance on the part of Federal agencies. To date, EPA has developed formal administrative guidelines and directives in the following areas:

- Project reporting by agencies
- Inspection and monitoring of Federal facilities
- Exemptions of Federal facilities.

EPA also reviews the efforts of other agencies to assure compliance. This portion of EPA's responsibility is carried out under Executive Order 11752 and Office of Management and Budget Circular A-106, which outline a management role for the Agency in ensuring compliance with requirements concerning all forms of pollution at Federal facilities.

### **Federal Noise Program Coordination**

Section 4 of the Act also requires EPA to coordinate all Federal noise research and control programs. EPA has planned and organized a two part program to integrate Federal agency noise abatement policies and programs into a national noise strategy.

The first part is a Communication and Information Exchange Program consisting of three elements: (1) joint publications concerning individual agency jurisdictions, programs and accomplishments; (2) a series of directories of all Federal noise personnel and laboratory resources that can be used in joint work programs; and (3) a series of regularly scheduled informal meetings among Federal agency noise people. A forum that has proven successful in fostering interagency cooperation is the informal luncheon meeting at which a host agency presents its noise program and solicits inquiry and comment from the others. Since the spring of 1977, over 15 agencies have participated in the meetings. EPA and other agencies plan to continue them.

The second part of the program is a Joint Special Studies and Demonstration Program to integrate the independent Federal agency authorities into a consistent overall Federal strategy. Ten cooperative projects with other Federal agencies are in progress as a result of this program: 3 in surface transportation noise; 2 in construction site noise, 2 in occupational noise; and 3 special projects covering such areas as Federal procurement incentives for noise abatement. These projects will develop information on and demonstrate noise control measures and then facilitate their incorporation in Federal noise policies and programs. The process will complement EPA noise regulatory activities as well as State and local noise abatement actions.

The Agency has also established four interagency noise research panels, whose reports are listed along with the other EPA publications. The panels have generated reports that examined Federal RD&D activities during the FY73-FY75 period to determine the contribution of these efforts to the control of noise and understanding of its effects. Research activities in the areas of noise effects, aircraft noise, surface vehicle noise, and machinery noise were reported. The panels were reactivated in 1976 to update the data base and to assess the contribution of the on-going and planned RD&D programs to meeting the long range goals of a national noise abatement and control program. Reports on this subject will be published in early 1978.

#### **Consultations**

Other Federal agencies are required to consult with EPA before prescribing noise regulations. EPA may require public review of those regulations if the Agency determines the regulations do not sufficiently protect public health and welfare.

EPA has assisted other agencies by acting as a central clearinghouse for information, by lending equipment and by giving advice and consultation in developing effective noise assessment requirements as part of their programs. In addition EPA personnel are available to provide assistance in assessing individual projects of other agencies.

EPA has reviewed and commented upon the policies and regulations of such Federal agencies as DOT, HUD, DOC, and GSA. Regarding the pending decision on Federal occupational noise standards, EPA has strongly stated its case for a more stringent occupational noise standard than that proposed by the Department of Labor's Occupational Safety and Health Administration (OSHA).

The Agency's strong public stand for a more stringent occupational noise standard is based on the conclusion, which was reached after extensive study of the standard proposed by OSHA, that substantial impairment to hearing would be prevented by a stricter standard and that such a standard is both technically feasible and economically reasonable.

#### **Federal Status Report**

As a major part of its coordination activity, EPA is required to report periodically on the status and progress of Federal noise control activities. In June 1975, the Agency issued the first of such comprehensive reports describing and discussing interrelationships among the noise programs of 38 Federal agencies in the following areas: standards and regulations, hearing conservation, noise abatement, and research, development and demonstration. Since then EPA has issued reports describing the noise policies of the Navy, Air Force, and HUD. A report on FHWA will be issued shortly.

#### **EIS Review**

As a major part of its noise control effort, EPA reviews Environmental Impact Statements (EIS) submitted by other agencies. EIS review is carried out under the authority of the National Environmental Policy Act (NEPA) and Section 309 of the Clean Air Act.

NEPA requires agencies to prepare detailed statements of the environmental effects of their proposed major actions. The scope of "proposed major actions" now includes Federal funding, permitting, and regulating actions.

EPA reviews about 1500 draft and 500 final statements per year. Statements in which noise is a factor are reviewed primarily in the EPA regional offices, with Headquarters providing guidelines, manuals, and technical assistance as required. Although not required to do so by law, EPA prepares EISs on certain of its own environmental regulatory activities, including noise emission regulations under the Noise Control Act.

In making its noise evaluations of other agency EISs the Agency utilizes EPA noise criteria as well as standards of the agency preparing the EIS.

#### **Interagency Agreements**

EPA is receiving consulting and technical support in a number of program areas (e.g., health effects, measurement, monitoring) through agreements with other Federal agencies. EPA is currently working with the National Academy of Sciences Committee

on Hearing, Bioacoustics, and Biomechanics (CHABA), the USAF Aeromedical Research Lab, the U.S. Army Construction Engineering Research Lab, the National Bureau of Standards, the Department of Transportation, NASA, the Department of Agriculture (Forest Service), and the Naval Sea Systems Command.

#### **SECTION 5—IDENTIFICATION OF MAJOR SOURCES OF NOISE, NOISE CRITERIA, AND CONTROL TECHNOLOGY**

##### **Criteria and Levels Documents**

Under this Section of the Act, EPA is required to publish two major documents: the "Criteria Document" and the "Levels Document."

The "Criteria Document" represents an appraisal of available knowledge relating to the health and welfare effects of noise.

The "Levels Document" identifies levels of environmental noise requisite to protect the public health and welfare with an adequate margin of safety. In accordance with the Act, this document does not take economics and technology into account. However, it does provide helpful guidance in evaluating the benefits to be gained from noise abatement actions. An abbreviated version of the "Levels Document" is being prepared and should be available in the summer of 1978.

The agency is currently undertaking studies to supplement both of these major documents. These studies include work on: hearing loss, intrusive characteristics of noise, and effects of noise on the cardiovascular system.

##### **Major Sources Identification**

EPA is further required to publish reports identifying major sources of noise and to provide information on controlling noise from those sources.

Identification of a product as a major source of noise begins the 2-year statutorily directed regulatory process culminating in a noise emission regulation for new products, under Section 6 of the Act, if such a standard is feasible. The Agency has issued several

separate identification documents. The first identification, published June 21, 1974, encompassed

- Portable air compressors
- Medium and heavy trucks.

The second identification, published May 28, 1975, encompassed

- Wheel and crawler tractors (formerly wheel and track loaders, wheel and track dozers)
- Truck-mounted solid waste compactors
- Motorcycles
- Buses
- Truck-transport refrigeration units.

The third identification report, published on January 12, 1977, cited power lawn mowers as major noise sources. The fourth identification report, identifying pavement breakers and rock drills, was published on February 3, 1977.

EPA now is conducting a number of pre-identification studies that will allow decisions to be made on a phased basis concerning identification of additional major sources of noise. Among the products now under study are automobiles and light trucks, tires, chainsaws, snowmobiles, air conditioners, and earth moving equipment.

#### **Cost and Technology Reports**

EPA has published several cost and technology reports, which are noted in the list of EPA reports in the back of this brochure. As current programs move forward in the regulatory process, more such documents will be made available.

## SECTION 6--NOISE EMISSION STANDARDS FOR PRODUCTS DISTRIBUTED IN COMMERCE

EPA is authorized under this Section of the Act to promulgate noise emission regulations for any product identified as a major noise source. The Agency was specifically directed to consider products in the following categories:

- Construction equipment
- Transportation equipment  
(including recreational vehicles and related equipment)
- Motors and engines  
(including any equipment of which an engine or motor is an integral part)
- Electrical or electronic equipment.

In addition to health and welfare effects, those standards must take technological feasibility and cost of compliance into account.

### Final Regulations Issued

On January 14, 1976, the Agency published final regulations on newly manufactured *portable air compressors*. These regulations will have the effect of eliminating such compressors as a major source of construction site noise. The regulation, which sets a maximum noise level of 76 dBA at 7 meters, became effective January 1, 1978 for compressors with maximum rated capacity between 75 and 250 CFM, and becomes effective July 1, 1978 for units exceeding 250 CFM.

On April 13, 1976 the Agency published noise regulations for *medium and heavy trucks*. These regulations will reduce the urban traffic noise impact for 97 million people. The new standard, which sets a maximum noise level of 83 dBA at 50 feet during maximum acceleration, became effective January 1, 1978. A maximum level of 80 dBA becomes effective January 1, 1982. A more stringent standard has been reserved for promulgation in the 1985 time period.

### **Standards Development**

The noise regulatory program strives to employ noise measurement methodologies, or "standards," that are accurate and repeatable, that provide ease of enforcement for EPA and that are cost-effective to the industries that must implement them. EPA policy is to adopt, where practicable, measurement standards developed by voluntary standard-setting organizations and in general use. To this end, EPA's noise program has voting representation on the Acoustical Standards Planning Board of the American National Standards Institute (ANSI), and representatives on numerous technical working groups of such organizations at the Society of Automotive Engineers (SAE).

EPA participates in the activities of voluntary standards setting organizations after receipt of a formal request from the organization, and after determining that the organization's activities are compatible with EPA interests.

On occasion, noise standards developed by voluntary organizations do not meet EPA noise regulatory requirements. In such cases EPA develops the requisite measurement methodology, requesting cooperation from and participation of technical experts from voluntary standards-setting and other organizations.

In early 1977, EPA initiated a program to evaluate alternative noise measurement procedures for light motor vehicles and to arrive at a methodology best suited to its regulatory purposes. This program is run in an operational setting near Tucson, Arizona, where over 100 1977 model U.S. and foreign motor vehicles will be studied on a day-to-day basis.

To foster a better understanding of EPA needs, the Agency sponsored a standards development workshop under the auspices of ANSI and the Acoustical Society of America, in cooperation with the National Bureau of Standards. This three-day workshop was held in December 1977.

### **Proposed Regulations Issued**

On July 11, 1977 EPA proposed noise emission regulations for *new wheel and crawler tractors* having horsepower ratings from 20 hp to 500 hp (42 FR 3580-4).<sup>\*</sup> These machines are generally used for bulldozing and front-end loading operations at construction sites. A final rule is expected in the fall of 1978. The proposed regulation stipulates the following limits, measured at 15 meters:

<sup>\*</sup>Federal Register Issue and page number.

<u>Machine Type</u>	<u>HP</u>	<u>(dBA)</u>	<u>Effective Date</u>
Crawler Tractor	20-199	77	March 1981
		74	March 1984
Crawler Tractor	200-450	83	March 1981
		80	March 1984
Wheel Loader	20-249	79	March 1981
		76	March 1984
Wheel Loader	250-500	84	March 1981
		80	March 1984
Wheel Tractor	20 plus	74	March 1981

On August 26, 1977, the Agency proposed standards for *new truck mounted solid waste compactors*, better known as *garbage trucks* (42 FR 43226). A final rule is expected in the fall of 1978. This proposed regulation calls for a noise limit, during compaction and measured at 7 meters, of 78 dBA by January 1, 1979. Effective January 1, 1982, the noise limit would be 75 dBA.

On September 12, 1977, EPA proposed regulations to substantially reduce exterior and interior noise emitted from *new city buses, school buses, and inter-city buses* (42 FR 45776). A final regulation is expected in late 1978. The proposed bus standards, in dBA measured at 50 feet, are:

<u>Effective</u>	<u>Exterior Noise Level</u>	<u>Interior Noise Level</u> (at noisiest seat location)
1979	83	86
1983	80	83
1985	77	80

On March 15, 1978, EPA proposed regulations to reduce noise from *new motorcycles and new motorcycle replacement exhaust systems*. Street, off-road, and moped-type motorcycles are also covered. The proposed noise limits, in dBA measured at 15 meters are:

**Street Motorcycles**

<u>Effective Date</u>	<u>Sound Level</u>
January 1, 1980	83
January 1, 1982	80
January 1, 1985	78

**Moped-Typed Street Motorcycles**

<u>Effective Date</u>	<u>Sound Level</u>
January 1, 1980	70

**Off-Road Motorcycles  
170 cc Displacement and Less**

<u>Effective Date</u>	<u>Sound Level</u>
January 1, 1980	83
January 1, 1982	80
January 1, 1985	78

**Off-Road Motorcycles  
More than 170 cc Displacement**

<u>Effective Date</u>	<u>Sound Level</u>
January 1, 1980	86
January 1, 1983	82

The proposed regulation also calls for compliance labeling for new motorcycles and a label concerning its Stationary Sound Level. This label will aid State and local officials in enforcement against tampering and unlawful modifications. Final regulations are expected in the fall of 1979.

## **SECTION 7--AIRCRAFT NOISE STANDARDS**

Although aviation noise regulatory authority rests with the FAA, EPA is mandated to play a significant role in the aviation regulatory process. Under Section 7 of the Act, EPA is directed to prepare a comprehensive report on the problem of aircraft/airport noise and to submit regulatory proposals to the FAA.

Although EPA has no direct regulatory role, the Agency's actions under this Section of the Act do have a significant impact. The FAA is required to publish the EPA proposed regulations in the Federal Register within 30 days of receipt. Within 60 days after publication, the FAA is required to hold public hearings.

After those hearings, the FAA must either accept the EPA proposals or state in the Federal Register why the proposals were rejected.

If EPA believes that any FAA action regarding the EPA proposals does not adequately protect the public health and welfare, the Agency can request the FAA to publish a report in the Federal Register stating the basis behind any FAA decisions.

### **Report to Congress on Aircraft/Airport Noise**

On July 27, 1973, EPA completed, as scheduled, the "Report to Congress on Aircraft/Airport Noise" (Senate Document 93-8). The report presented findings and recommendations in four major areas:

1. Adequacy of FAA flight and operational noise controls.
2. Adequacy of noise emission standards on new and existing aircraft, together with recommendations on the retrofitting and phaseout of existing aircraft.
3. Implications of identifying and achieving levels of cumulative noise exposure around airports.
4. Additional measures available to airport operators and local governments to control aircraft noise.

This report established the need for the submission of regulatory proposals by EPA to the FAA.

#### **Submission of Proposed Rules to FAA**

The proposals identified as necessary for EPA submission to the FAA can be grouped into three categories:

- **Source Regulations:**
  - SST – Submitted 27 February 1975 (Future SSTs) (40 FR 14093)
  - SST – Submitted 13 January 1976 (Present SSTs) (41 FR 6270)
  - Propeller Driven Small Airplanes – Submitted 6 December 1974 (40 FR 1061)
  - Retrofit – Submitted 28 January 1975 (40 FR 8218)
  - Fleet Noise Level – Submitted 28 January 1975 (40 FR 8222)
  - Modify FAR PART 36 -- Submitted 1 October 1976 (41 FR 47358)
  - Short Haul – (Under evaluation)
- **Operational Regulations**
  - Approach and Landing (3) – Submitted 29 August 1975 (40 FR 44256)
  - Minimum Altitude – Submitted 6 December 1974 (40 FR 1072)
  - Takeoff – (Under evaluation)
- **Airport Noise Regulatory Process – Submitted 22 October 1976 (41 FR 51522)**

Hearings on all of the EPA proposals have been held. The FAA has accepted the EPA proposals concerning reduced flap approach and landing and retrofit, except for retrofit of business jets. The FAA has not yet taken any formal action on the EPA proposals pertaining to FAR PART 36 or airports. The FAA has issued notices of decisions not to prescribe the EPA proposals pertaining to: propeller driven small airplanes, except for some minor provisions; fleet noise level; two-segment visual approach and landing; two-segment instrument approach and landing; and minimum altitudes.

To assist in determining noise levels around airports, a prerequisite to compatible land use planning, the Environmental Protection Agency has developed a simplified and objective approach which is called the Airport Noise Evaluation Process. This process was designed for use by individuals who do not have an in-depth background in aircraft acoustics. The process utilizes information pertaining to airport operations and local demographic characteristics. In most cases, the EPA process can be used without the need for computers, using the EPA developed workbook manual "Calculations of Day-Night Levels [ $L_{dn}$ ] Resulting from Civil Aircraft Operations."

The manual will be revised as new aircraft operating procedures come into use. For example, EPA will soon publish an addendum on the Air Transport Association of America takeoff procedures adopted December 1976.

The Agency is also revising its "Airport Noise Abatement Planning" booklet, for citizens wanting to learn what they can do on the local level.

In conjunction with the American Institute of Planners (AIP), EPA held three workshops during 1977 to present the Airport Noise Evaluation Process to airport planners, government officials, and all other interested parties. Based on the success of the workshops held in Kansas City, Mo., San Diego, and Washington, D.C., a second series of five seminars is planned for 1978.

#### **SST Activities**

EPA provided technicians and equipment to monitor the noise emissions of the initial Concorde O2 SST flights into Dulles International and Dallas, Fort Worth airports in September of 1973. The results of that monitoring exercise were published and are available.

In January 1976, EPA provided a detailed analysis of the issues associated with the applications of British Airways and Air France for Concorde SST flights to U.S. airports.

In October 1977, the FAA published a supplemental draft EIS and a supplemental NPRM that reopened the docket on the two previously submitted EPA proposals. The FAA conducted hearings at which EPA testified, but, as of this date, the regulatory actions on SST noise are not complete.

On February 9, 1978, The "Seventeenth Report by the Committee on Government Operations" was published, addressing aircraft noise and the Concorde (Noise Report 95879). In that report the Committee concluded, because of EPA progress and FAA inactivity regarding aircraft noise, that:

"... Congress should consider amending the Noise Control Act to give EPA the primary responsibility for setting standards to reduce aircraft noise."

#### **SECTION 8 -PRODUCT LABELING**

Under this Section, EPA is mandated to label any product

1. Emitting noise capable of adversely affecting the public health or welfare
2. Sold wholly or in part on the basis of its effectiveness in reducing noise.

On June 22, 1977, the Agency published the Proposed General Provisions for Noise Labeling and Proposed Noise Labeling Requirements for Hearing Protectors. Final rules for both actions are expected in the summer of 1978.

Studies are underway on several household and consumer products to determine their candidacy for noise labeling. The Agency plans to propose labeling regulations for at least two products in fiscal year 1978.

#### **SECTION 14-RESEARCH, TECHNICAL ASSISTANCE AND PUBLIC INFORMATION**

This Section of the Act provides EPA with the authority to

- Conduct and finance research
- Advise on training of noise control personnel and on selection and operation of noise abatement equipment

- **Develop improved methods of measuring and monitoring noise**
- **Prepare model State or local legislation for noise control**
- **Disseminate information to the public.**

**Conduct and Finance Research**

In the area of noise effects, studies are being conducted concerning:

- **Investigation of the effects of protracted noise exposure on blood pressure and heart rate using Rhesus monkeys**
- **Assessment of the relationship between annoyance and intrusiveness of noise sources**
- **Early detection of noise-induced hearing impairment.**

EPA helped support and participated in a multi-nation seminar on the effects of noise on wildlife. New information in this area will assist EPA and other agencies in making environmental impact evaluations.

EPA completed two investigations dealing with people's perception of noise and their attitudes about their noise environment:

- **"Comparison of Various Methods for Predicting the Loudness and Acceptability of Noise"**
- **"The Urban Noise Survey."**

The findings and conclusions of both investigations are being employed in EPA environmental noise impact assessment procedures.

RD&D programs have been initiated with Purdue University and with NASA. The Purdue program deals with identification of truck noise sources and engine enclosure investigations. The EPA/NASA program concerns development of several "quiet" propeller configurations for small general aviation aircraft. Both programs are in support of future regulatory actions. Additional study programs may be identified as a result of the inter-agency noise panel reviews (see Section 4).

Other RD&D programs initiated in FY77 and planned for FY78 deal with:

- Quiet truck technology
- Quiet tire technology
- Internal combustion engine technology.

#### State and Local Technical Assistance

Assistance to State and local agencies is provided by both the headquarters staff and the 10 EPA regional offices, with the latter assuming the major role in this area. Efforts to date have concentrated on encouraging the development of State and local noise control programs to implement in-use and operational measures for immediate noise control benefits and to complement EPA regulatory efforts. Examples of these activities range from assisting the Cities of Philadelphia, Pa. and Boise, Idaho with planning and conducting a community noise measurement program to working with the City of Kansas City on the development of a noise ordinance and helping the State of Washington develop and implement a State noise control program. EPA is supporting the City of Chicago and the State of Florida with programs to determine the contribution of motor vehicles to environmental noise.

EPA also surveys and assesses State and municipal environmental noise programs. In February 1975, EPA published "Noise Source Regulation in State and Local Noise Ordinances", summarizing laws and ordinances stipulating specific decibel levels. In 1974, EPA surveyed 55 States and territories and 235 municipalities. The results of this survey are contained in "State and Municipal Noise Control Activities 1973-1974." EPA is presently conducting a survey of over 900 communities in the U.S. with populations above 25,000. The result of this survey will describe the status of State and local noise control capabilities, and will identify specific areas where technical assistance is needed.

#### *Advice on Training of Noise Control Personnel*

EPA sponsors regional noise workshops to train State and local officials in all aspects of environmental noise. These workshops are administered by the EPA regional noise program personnel. EPA has conducted over 50 workshops in various locations throughout the country, educating an estimated 2,000 officials.

To further assist State and local noise programs, EPA published "Guidelines for Developing a Training Program in Noise Survey Techniques" in July 1975.

#### *Development of Noise Training Manual*

EPA is developing a noise training manual for three target audiences – decision-makers, environmental managers and entry level noise technicians. Upon development, the manual will also be adapted into an accredited correspondence course for State and local noise officials.

#### *Advice on Selection and Operation of Noise Abatement Equipment*

EPA also advises State and local governments on types and uses of sound measurement and analysis instruments. Sound level meters and other types of equipment are available for loan to States and localities through the EPA regional noise offices. EPA also evaluates instruments such as sound level meters and community noise monitoring systems.

#### *Development of Improved Methods for Measuring and Monitoring Noise*

EPA has recently developed a community noise monitoring and assessment manual. This manual is designed to provide local community officials with uniform guidelines for the design and implementation of a community monitoring program, including a locally administered social survey program and an acoustical noise monitoring program. EPA is developing a computer based analysis program to provide processing and analysis services for communities using the EPA community noise monitoring and assessment manual.

#### *Preparation of Model State and Local Legislation*

Both a "Model Community Noise Control Ordinance" and model State noise control enabling legislation have been developed by EPA. To date, 17 states have incorporated

"Model Ordinance" guidelines in their noise control programs. The model State law was developed in cooperation with the Council of State Governments and was published by them in 1974. As a complement to the model community ordinance, EPA is developing a Code of Recommended Practices with simple and technically correct local enforcement procedures. EPA is also developing Model Noise Control Provisions for Building Codes. The Model Provisions and an accompanying Implementation Manual will be designed to provide communities with the basic tools and program guidelines necessary to reduce intrusive noise in multifamily dwellings and schools.

*State and Local Noise Control Demonstration Program - Quiet Communities Program (QCP)*

In September 1977, EPA launched its first Quiet Communities Program in Allentown, Pennsylvania. The QCP is a pilot project to demonstrate the application of the best available techniques for local noise control. The program includes a community noise assessment program, model local noise control strategy, noise control legislation, and an enforcement program. The emphasis of the QCP effort is on total community involvement and action, aided by EPA guidance and fiscal support. It is anticipated that two more pilot QCP demonstrations will be started in 1978.

Allentown has just completed the first stage of the program—a comprehensive assessment study to identify and define their noise control needs. The assessment data will be incorporated into a local noise control strategy and the drafting of a responsive noise control ordinance.

*Each Community Helps Others (ECHO)*

The ECHO program is designed to aid communities throughout the U.S. in developing or improving noise abatement programs through the advice and assistance of noise control experts from other communities. Program emphasis is on the transferability of local noise control skills and experience. The ECHO program was successfully initiated in January 1978. Examples of the ECHO activities are:

- Washington Metropolitan Council of Governments is assisting Norfolk, Virginia
- The State of Florida is assisting Charleston, South Carolina

- Lincoln, Nebraska is assisting Des Moines, Iowa and Council Bluffs, Iowa
- Boulder, Colorado is assisting Sioux Falls, South Dakota
- San Diego, California is assisting Tempe, Arizona
- Portland, Oregon is assisting Anchorage, Alaska.

To date, 105 man-hours of community noise advisor expertise have been contributed to recipient communities; an estimated 360 man-hours are projected to be contributed each quarter. The program is now being expanded to include 20 more communities.

*Senior Environmental Employment Program (Older American Workers)*

The Agency has initiated a 3-year demonstration project to hire Older Workers to help each EPA Regional Noise Representative assist State and local noise agencies. The program is funded by a grant from the HEW Administration of Aging (AOA) under terms of an interagency agreement between AOA and EPA. Each EPA Region has been allocated support for 1 man-year of effort per year for the 3-year period ending August, 1980. The 11 Older Americans now on board received a 3-day training course in basic acoustics in Kansas City, Missouri on February 22-24, 1978.

*State Assignee Program*

EPA has developed a program through which a limited number of professional and technical people are hired by the Agency and detailed to work in State noise programs for 2 years. The program will assist in the development of viable State programs. Upon completion of their 2-year appointment the Assignees may be employed by their respective agencies. For 1978, 10 states were awarded such assignee positions.

*Dissemination of Public Information*

A major public information effort was launched in 1976 with the opening of an environmental noise exhibit. The exhibit, designed to stimulate the audience's awareness of noise and its effects, is now on permanent display in Chicago at the Museum of Science and Industry.

To inform the public on the hazards of environmental noise EPA is developing

- A noise curriculum module to be used in elementary and junior high schools
- A noise curriculum module to be used in the Joint Apprenticeship training program of the International Operating Engineers Union
- A curriculum unit to be used by the International Brotherhood of Police Officers in training apprentice and journeymen police officers to properly enforce noise regulations
- Hearing conservation information to be given out in conjunction with the administering of hearing tests in public schools.

In 1978, the Agency will be developing consumer oriented information to help people reduce the noise level in their homes, neighborhoods and communities. Included will be information to prepare consumers to understand and use the EPA product noise labels in making purchasing decisions.

#### **SECTION 15—LOW NOISE EMISSION PRODUCTS**

On February 13, 1974, EPA issued certification procedures for low-noise emission products to be purchased by the Federal government. Since these procedures can apply only to products for which a new product regulation has been issued under Section 6, no program could be initiated prior to promulgation of the first new product regulation. EPA is now implementing a comprehensive program concerning low-noise emission products.

In May of 1977, EPA proposed regulations implementing Section 15 of the Act (42 FR 27442) by establishing criteria for determining if a product will qualify as a low noise emission product. Also proposed were the specific LNEP levels for new medium and heavy trucks and portable air compressors, products that are now subject to EPA noise rules. Final rules are expected this summer.

#### **SECTION 17--RAILROAD NOISE EMISSION STANDARDS**

Under this Section of the Act, EPA promulgated on December 31, 1975, regulations setting specific maximum in use noise standards applicable to trains operated by interstate rail carriers.

The standards, which are measured at 100 feet perpendicular to the center line of the track, are:

- (Effective December 31, 1976)  
Locomotives  
(Best maintenance)  
73 dBA at idle  
93 dBA stationary at all other throttle settings  
96 dBA moving at any speed
- (Effective December 31, 1976)  
Rail cars  
88 dBA at speeds up to and including 45 mph  
93 dBA at speeds greater than 45 mph
- (Effective December 31, 1979)  
Locomotives  
(Newly manufactured)  
70 dBA at idle  
87 dBA stationary at all other throttle settings  
90 dBA moving at any speed

A detailed background study report on railroad noise was prepared as a part of the rule making process.

**Publications Mailing List Application**



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
OFFICE OF NOISE ABATEMENT AND CONTROL  
WASHINGTON, D.C. 20460**



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY**  
Office of Noise Abatement and Control  
Washington, D.C. 20460

**MAILING LIST APPLICATION**

TO BE COMPLETED BY APPLICANT (One letter/number per block. Do not use periods, commas, etc.)

C	1	INITIALS	LAST NAME	TITLE
A	2	ORGANIZATION (if applicable)		
R	3	STREET ADDRESS OR P.O. BOX NO.		
D	4	CITY	STATE	ZIP CODE

N - New Application   
  C - Change Name/Address   
  D - Delete Name/Address   
  S - Add Area of Interest Code(s)   
  D - Delete Area of Interest Code(s)

CHECK APPLICABLE BOX(ES)

PREVIOUS NAME/ADDRESS (if changed) \_\_\_\_\_ DATE OF APPLICATION \_\_\_\_\_

PROCEED TO PAGE 2 AND COMPLETE APPROPRIATE SECTIONS.

**FOR EPA USE ONLY (Do NOT write in this space)**

ORIGINATOR (Name)	TELEPHONE NO.
REMARKS	
AUXILIARY CODE - Mark an "X" in the appropriate auxiliary code box(es)	
<input checked="" type="checkbox"/> 01 <input type="checkbox"/> 02 Press Release <input type="checkbox"/> 03 Advance Notice of Proposed Rule Making (ANPRM) <input type="checkbox"/> 04 Notice of Proposed Rule Making (NPRM) <input type="checkbox"/> 05 Final Regulation <input type="checkbox"/> 06 Background Documents <input type="checkbox"/> 07 Economic Impact Analysis <input type="checkbox"/> 08 Environmental Impact Statement	<input type="checkbox"/> 09 Technical Reports (other than R&D) <input type="checkbox"/> 10 R&D Reports <input type="checkbox"/> 11 Guidelines/Manuals <input type="checkbox"/> 12 Federal Noise Program Reports <input type="checkbox"/> 13 Educational Materials/General Brochures <input type="checkbox"/> 14 RFP's <input type="checkbox"/> 15 Scientific Reports - Effects of Noise
ADDRESSEE ADDED BY - Check one	
<input type="checkbox"/> 20 DAA <input type="checkbox"/> 21 S&H Div <input type="checkbox"/> 22 Tech & Fed Prog Div <input type="checkbox"/> 23 State & Local Prog Div <input type="checkbox"/> 24 Sci Ass	
SIGNATURE (Project Officer Approval)	DATE

**FOR GSA USE ONLY (Do NOT write in this space)**

Doc ID	Mail List	Yr	Mo	Day	AGENCY IDENTIFICATION NUMBER	0 CARD ONLY											
1	37	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7

**TO BE COMPLETED BY APPLICANT**

ORGANIZATION TYPE (Check one that applies)	AREA OF INTEREST (Check appropriate areas)	
<b>FEDERAL GOVERNMENT</b> <input type="checkbox"/> 0101 Advisory Board <input type="checkbox"/> 0102 Intra-agency Review Office <input type="checkbox"/> 0103 Inter-agency Review Office <input type="checkbox"/> 0104 Federal Agency/Bureau <input type="checkbox"/> 0106 Regional EPA Office <input type="checkbox"/> 0106 EPA Headquarters Office <input type="checkbox"/> 0107 Member of Congress <input type="checkbox"/> 0108 Congressional Staff <input type="checkbox"/> 0109 Foreign Government	<b>GENERAL AREAS</b> <input type="checkbox"/> 0101 Available Technology <input type="checkbox"/> 0102 Noise Measurement <input type="checkbox"/> 0103 Measurement Methods <input type="checkbox"/> 0104 Acoustic Assurance Programs <input type="checkbox"/> 0105 Special Local Conditions - National <input type="checkbox"/> 0105 Special Local Conditions - Motor <input type="checkbox"/> 0106 Strategy/Programming <input type="checkbox"/> 0107 Statistical Ordinances <input type="checkbox"/> 0108 Land Use <input type="checkbox"/> 0109 Noise Measurement <input type="checkbox"/> 0110 Noise Labeling Procedures <input type="checkbox"/> 0111 Audiometric Testing Equipment <input type="checkbox"/> 0112 Soundproofing <input type="checkbox"/> 0113 Warning Systems	<b>ELECTRIC/ELECTRONIC PRODUCTS</b> <input type="checkbox"/> 0101 Workshop Tools <input type="checkbox"/> 0102 Climate and Environmental <input type="checkbox"/> 0102 Control (Air Conditioning, <input type="checkbox"/> 0102 Fans, etc.) <input type="checkbox"/> 0103 Office Equipment <input type="checkbox"/> 0104 Lawn and Garden Care <input type="checkbox"/> 0104 Equipment <input type="checkbox"/> 0105 Music Amplifiers/Receivers <input type="checkbox"/> 0106 Pumps and Compressors <input type="checkbox"/> 0107 Transformers/Power <input type="checkbox"/> 0107 Station Equipment <input type="checkbox"/> 0108 Chain Saws <input type="checkbox"/> 0109 Noise Emission Labeling
<b>STATE/LOCAL GOVERNMENT</b> <input type="checkbox"/> 0201 Official of State Government <input type="checkbox"/> 0202 Official of Local Government	<b>AIRPORTS</b> <input type="checkbox"/> 0201 Commercial <input type="checkbox"/> 0202 General Aviation <input type="checkbox"/> 0203 Military	<b>APPLIANCES</b> <input type="checkbox"/> 0201 Kitchen <input type="checkbox"/> 0202 Laundry <input type="checkbox"/> 0203 Personal Care (Hair <input type="checkbox"/> 0203 Dryers, etc.) <input type="checkbox"/> 0204 Industrial Management <input type="checkbox"/> 0204 (Vacuum Cleaners, etc.) <input type="checkbox"/> 0205 Crafts, Hobbies, and Non <input type="checkbox"/> 0205 Workshop Tools (Sewing <input type="checkbox"/> 0205 Machines, etc.) <input type="checkbox"/> 0206 Noise Emission Labeling
<b>PROFESSIONAL ASSOCIATION</b> <input type="checkbox"/> 0301 Official of National Association <input type="checkbox"/> 0302 Member of National Association <input type="checkbox"/> 0303 Official or Member of State/ <input type="checkbox"/> 0303 Local Association	<b>AIRCRAFT</b> <input type="checkbox"/> 0301 Conventional <input type="checkbox"/> 0302 Supersonic <input type="checkbox"/> 0303 General Aviation <input type="checkbox"/> 0304 Helicopter <input type="checkbox"/> 0305 Light Propellers <input type="checkbox"/> 0306 Sonic Boom	<b>INDUSTRIAL MACHINERY/EQUIPMENT</b> <input type="checkbox"/> 0301 Printing <input type="checkbox"/> 0302 Textile <input type="checkbox"/> 0303 Agriculture <input type="checkbox"/> 0304 Mining <input type="checkbox"/> 0305 Wood Processing <input type="checkbox"/> 0306 Chemical Processing <input type="checkbox"/> 0307 Surface Finishing <input type="checkbox"/> 0308 Metal Finishing <input type="checkbox"/> 0309 Paper Mills <input type="checkbox"/> 0310 Noise Emission Labeling
<b>TRADE ASSOCIATION</b> <input type="checkbox"/> 0401 Official of National Association <input type="checkbox"/> 0402 Member of National Association <input type="checkbox"/> 0403 Official or Member of State/ <input type="checkbox"/> 0403 Local Association	<b>SURFACE TRANSPORTATION</b> <input type="checkbox"/> 0401 Railroads <input type="checkbox"/> 0402 Motor Vehicle Trucks <input type="checkbox"/> 0403 Light Trucks and Pickups <input type="checkbox"/> 0404 Truck Components/Trailer Components <input type="checkbox"/> 0404 (Hull, Hydraulic Pumps, etc.) <input type="checkbox"/> 0405 Buses <input type="checkbox"/> 0406 Guided Mass Transit <input type="checkbox"/> 0407 Automobiles <input type="checkbox"/> 0408 Motorcycles <input type="checkbox"/> 0409 Motorcycle Motor Cycles <input type="checkbox"/> 0410 Tires <input type="checkbox"/> 0411 Highway Noise <input type="checkbox"/> 0412 Noise Emission Labeling	<b>RECREATIONAL AND LEISURE</b> <input type="checkbox"/> 0401 Snowmobiles <input type="checkbox"/> 0402 Motorcycles <input type="checkbox"/> 0403 Off Road Vehicles <input type="checkbox"/> 0404 Toys <input type="checkbox"/> 0405 Sports Equipment <input type="checkbox"/> 0406 Noise Emission Labeling
<b>NEWS MEDIA</b> <input type="checkbox"/> 0501 Columnists and Writers <input type="checkbox"/> 0502 Newspapers/Newsletters <input type="checkbox"/> 0503 Magazines and Journals <input type="checkbox"/> 0504 Radio/TV	<b>CONSUMER PRODUCTS</b> <input type="checkbox"/> 0501 Labeling and equipment <input type="checkbox"/> 0502 Hazard Building Elements <input type="checkbox"/> 0503 Hazardous Building Elements <input type="checkbox"/> 0504 Stationary Equipment <input type="checkbox"/> 0505 Vehicle Equipment <input type="checkbox"/> 0506 Hazardous Equipment <input type="checkbox"/> 0507 Pneumatic/Hydraulic Power <input type="checkbox"/> 0508 Sensitive Areas <input type="checkbox"/> 0509 Construction Site Noise <input type="checkbox"/> 0510 Mining <input type="checkbox"/> 0511 Noise Emission Labeling	<b>NON-CONCRETE PRODUCTS</b> <input type="checkbox"/> 0501 Hearing Protection Devices <input type="checkbox"/> 0502 Building Materials <input type="checkbox"/> 0503 Enclosing Materials <input type="checkbox"/> 0504 Mullins <input type="checkbox"/> 0505 Acoustic Treatment Labeling
<b>BUSINESS/INDUSTRY</b> <input type="checkbox"/> 0601 Component Parts Manufacturing <input type="checkbox"/> 0602 End Product Manufacturing <input type="checkbox"/> 0603 End Product Wholesale/Retail <input type="checkbox"/> 0604 End Product User <input type="checkbox"/> 0605 End Product Leasing/Renting <input type="checkbox"/> 0606 End Product Maintenance/Repair <input type="checkbox"/> 0607 Consulting/Planning Firm <input type="checkbox"/> 0608 Law Firm <input type="checkbox"/> 0609 Airport Proprietor	<b>INTERNAL COMBUSTION ENGINES POWERED PRODUCTS</b> <input type="checkbox"/> 0601 Lawn and Garden Care Equipment <input type="checkbox"/> 0602 Chain Saws <input type="checkbox"/> 0603 Pumps and Compressors <input type="checkbox"/> 0604 Snow Blowers <input type="checkbox"/> 0605 Noise Emission Labeling	<b>EFFECTS/FITNESS</b> <input type="checkbox"/> 0601 Hearing Loss <input type="checkbox"/> 0602 Effects on Performance, Sleep <input type="checkbox"/> 0602 Disturbance, Nausea, etc. <input type="checkbox"/> 0603 Performance & <input type="checkbox"/> 0603 Behavior, etc. <input type="checkbox"/> 0604 Population Exposure
<b>EDUCATIONAL INSTITUTION</b> <input type="checkbox"/> 0701 University/College <input type="checkbox"/> 0702 High School <input type="checkbox"/> 0703 Vocational	<b>INTERNAL COMBUSTION ENGINES POWERED PRODUCTS</b> <input type="checkbox"/> 0601 Lawn and Garden Care Equipment <input type="checkbox"/> 0602 Chain Saws <input type="checkbox"/> 0603 Pumps and Compressors <input type="checkbox"/> 0604 Snow Blowers <input type="checkbox"/> 0605 Noise Emission Labeling	<b>OTHER NOISE AREAS</b> <input type="checkbox"/> _____ <input type="checkbox"/> _____ <input type="checkbox"/> _____ <input type="checkbox"/> _____
<b>OTHER</b> <input type="checkbox"/> 0801 Public Interest/ <input type="checkbox"/> 0801 Environmental Group <input type="checkbox"/> 0802 International Organization <input type="checkbox"/> 0803 Library <input type="checkbox"/> 0804 Concealed Private Citizen <input type="checkbox"/> 0805 Financial Firm <input type="checkbox"/> 0806 Voluntary Scientists <input type="checkbox"/> 0806 Organization		

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

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U. S. Environmental Protection Agency  
Office of Noise Abatement and Control (AW - 490)  
Washington, D. C. 20460

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APPLICATION

The Department of Transportation, through the Federal Railroad Administration, is responsible for the enforcement of this regulation. Compliance procedures were published in the Federal Register on August 23, 1977 (42 FR 42343).

On August 23, 1977, the U.S. Circuit Court of Appeals for the District of Columbia, on litigation brought by the Association of American Railroads, ordered EPA to revise its rail carrier rules to encompass *all* railroad equipment and facilities. This would provide for comprehensive Federal preemption over State and local rail carrier noise ordinances. The Court ordered that final EPA rules be issued by August 1978.

#### **SECTION 18—MOTOR CARRIER NOISE EMISSION STANDARDS**

On October 29, 1974, EPA promulgated regulations, effective October 15, 1975, setting specific maximum in-use noise standards applicable to vehicles over 10,000 pounds Gross Vehicle Weight Rating (GVWR) operated by interstate motor carriers. This regulation will lessen the noise impact for approximately 10 million people. The standards are:

88 dBA stationary runup  
86 dBA up to and including 35 mph  
90 dBA over 35 mph

The regulation also requires vehicle exhaust systems not to be defective and bans the use of noisy tires on vehicles subject to the regulation.

Present plans call for revising these in-use standards to require new trucks meeting the more stringent new product standards promulgated under Section 6 to continue to meet more stringent levels while in use.

The Department of Transportation's Bureau of Motor Carrier Safety (BMCS) is responsible for enforcement of this regulation. BMCS issued compliance regulations on September 12, 1975. BMCS and several States and localities are now enforcing these regulations.

#### **STUDIES AND SPECIAL PROJECTS**

A document of major importance is the National Noise Abatement Strategy, which was published for comment in October of 1976 and has been revised and was reissued in April of 1977. This general strategy will form the basis for specific program strategies in surface transportation noise and construction noise that will be developed in 1978.

EPA is also heavily involved in developing industry-forecasting models, decision-making analyses, and methodology for determining the economic costs and benefits of noise abatement.

#### **ENFORCEMENT**

The primary responsibilities of the Noise Enforcement Division include development and implementation of enforcement regulations requiring testing, record keeping, reporting, and any necessary remedial actions by manufacturers of new products for which standards or labeling requirements are prescribed under Sections 6 and 8 of the Noise Control Act. In addition, the Division assists EPA regions, States and localities in enforcing Federal noise control standards and regulations and in designing and enforcing supplementary State and local controls.

The primary Federal enforcement strategies to be applied to new products are:

- Production verification testing of initial representative products at the assembly line.
- Statistical sampling and testing of new products at the assembly line.
- Manufacturer's time-of-sale warranty.
- Tampering prohibitions.
- Maintenance instruction requirements.
- Administrative orders including recall of noncomplying products.

The EPA Noise Enforcement Facility, located in Sandusky, Ohio, is equipped with a low-speed passby test track and a stationary runup pad for testing trucks and compressors, respectively. These testing facilities have been used to conduct EPA tests on regulated products and to monitor and correlate manufacturer test facilities. Additionally, the Division has two Mobile Noise Enforcement Facilities that have been used in site comparison studies with truck and compressor manufacturers and to develop field test data on additional products being studied for future regulatory action.

The Division is monitoring the actions taken by manufacturers of portable air compressors and medium and heavy duty trucks in compliance with new product noise emission standards that became effective on January 1, 1978.

The Division is continuing the development of enforcement regulations for additional new products, administrative hearing procedures, and a regulation controlling the importation of products regulated under the Noise Control Act.

A major portion of the Division's State and local guidance activities is currently focused on the development of noise enforcement guidance for State and local police officers.

#### **NOISE INFORMATION SYSTEM**

EPA operates, under contract, a computer-based Noise Information Storage and Retrieval System. Documents containing noise data or information are cross-indexed and filed to provide a comprehensive collection. The system is designed primarily to support the EPA standards and regulations activity. Access to the system may be obtained to research specific subjects by writing to the Director, Standards and Regulations Division, ONAC.

#### **INTERNATIONAL ACTIVITIES**

EPA performs a number of important noise related functions on the international level. These activities are conducted on both an ad hoc basis and as part of a continuing international effort toward reducing environmental noise and harmonizing the efforts of individual countries.

EPA has participated in ad hoc noise activities of the following international groups:

- World Health Organization
- NATO
- US-USSR Working Group on the Enhancement of the Urban Environment
- International Organization for Standardization.

A major on-going EPA activity is the Agency's participation in the efforts of the International Civil Aviation Organization (ICAO). The Agency, through participation as an advisor to the U.S. delegate, provides recommendations on international aviation matters, exchanges views on environmental considerations, and reviews and recommends aircraft noise standards.

EPA is a major participant in the noise activities of the Paris-based Organization for Economic Cooperation and Development (OECD). EPA was the lead U.S. agency in the noise area, with its representative acting as the official U.S. delegate to the International

Ad Hoc Group on Noise, which was chaired by another EPA official. The OECD Ad Hoc Group on Noise completed a 2-year study in December 1977, with reports soon to be published on the following subjects:

- Decision Criteria for Noise Abatement Policies
- Economic Incentives for Noise Abatement
- Regulations and Low-Cost Measures for Noise Abatement

An EPA noise official recently chaired an international noise task group under the U.N. Economic Commission for Europe (ECE) in Geneva, Switzerland. The task force examined information on environmental noise problems and control measures and appropriate research activities related to noise control. The ECE will issue a report in the spring of 1978 on "National Approaches to Community Noise Problems."

EPA noise officials also participate in:

- The cooperative environment program of the Commission of European Communities, in Brussels, Belgium.
- Planning for the third International Congress on Biological Effects of Noise to be held in Freiburg, Germany in September 1978.

#### **MONITORING PROGRAM**

EPA is planning to initiate a noise monitoring effort having two primary facets—environmental trend monitoring and specific source monitoring. As presently planned, both the trend and source-specific monitoring will be carried out at national and local levels. At each level, the environment (geographic location) and personal exposure will be examined through physical noise measurements and social surveys. The Agency anticipates that the trend monitoring effort will:

- Establish a baseline from which to assess changes in the noise environment
- Determine the population at risk
- Establish standard methods and procedures for quality assurance and comparability of data

- Provide assistance to States and municipalities in assessing the success of their noise control programs.

Source-specific monitoring is primarily designed to support the EPA regulatory development process.

#### NOISE CONTROL PROGRAM BUDGETS

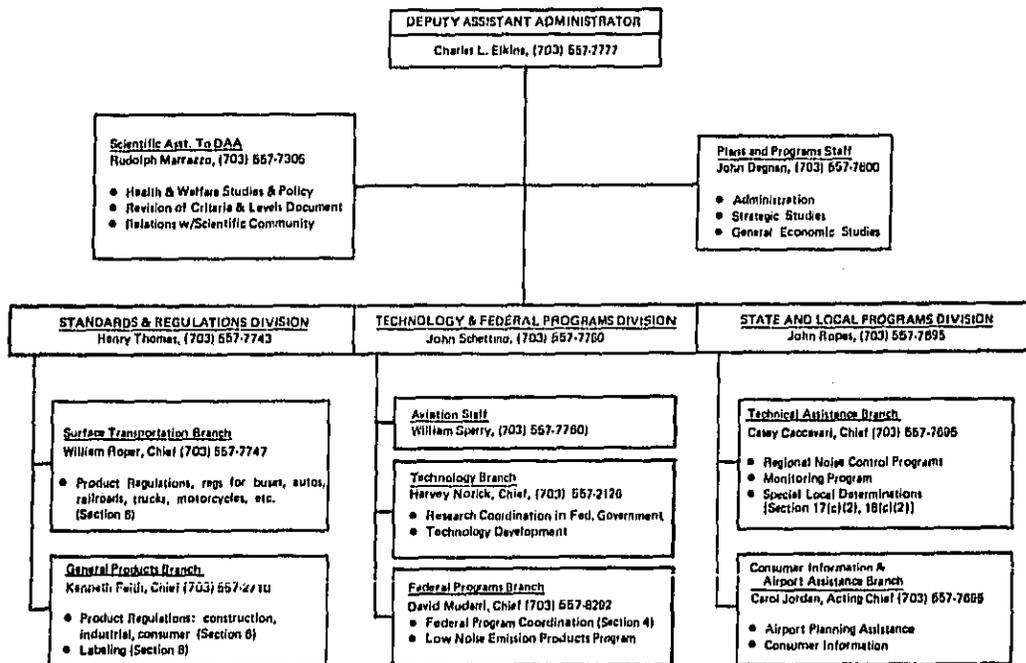
Fiscal Year	Office of Noise Abatement & Control		Office of Enforcement Noise Enforcement Division		Regional Officers**
	(\$Millions)	(Positions)	(\$ Thousands)	(Positions)	(Positions)
1971	\$ .3	11	\$ 0	0	0
1972	1.2	12	0	0	0
1973	2.7	15	0	0	0
1974	4.2	45	20.6	1	0
1975	5.1	55	20.8	1	0
1976	9.8	74	385.0	18	10
1977	9.8	74	707.0	22	11
1978	10.3	76	1,027.0	24	12
1979	10.0*	68*	916.0	22*	15*

\*Recommended in the President's Budget Message to the Congress.

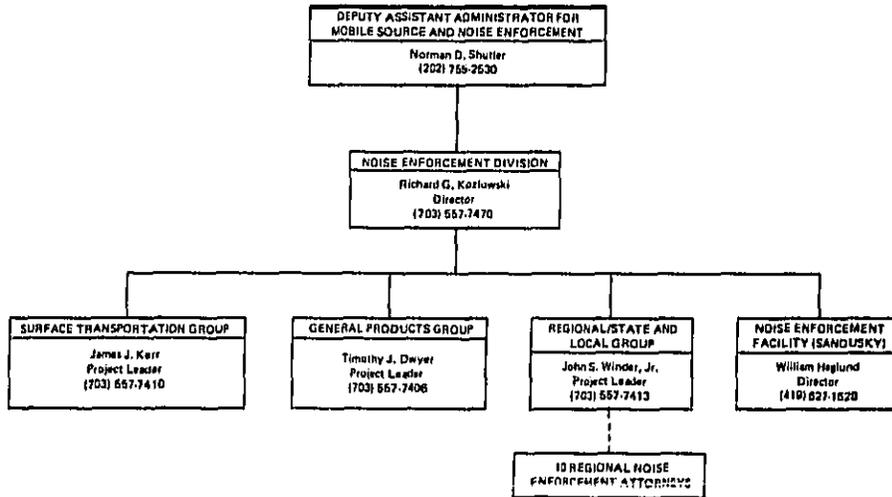
\*\*Dollar funding included with Office of Noise Abatement and Control.

## OFFICE OF NOISE ABATEMENT AND CONTROL ORGANIZATION CHART

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**OFFICE OF MOBILE SOURCE AND NOISE ENFORCEMENT**



**EPA REGIONAL NOISE REPRESENTATIVES**

EPA Region	States	Address	Noise Representatives
I	Maine, N.H., Vt., Mass., R.I., Conn.	JFK Building Room 2113 Boston, Mass. 02203	Mr. Al Hicks (617/223-5708)
II	N.Y., N.J., P.R., V.I.	26 Federal Plaza Room 907G New York, N.Y. 10007	Mr. Tom O'Hare (212/264-2109)
III	Pa., Md., Del., W. Va., Va., D.C.	Curtis Building Room 225 6th & Walnut Sts. Philadelphia, Pa. 19106	Mr. Patrick Anderson (215/597-9118)
IV	N.C., S.C., Tenn., Ky., Miss., Ga., Fla., Al.	345 Courtland St., N.E. Atlanta, Ga. 30308	Dr. Kent Williams (404/881-4861)
V	Wisc., Ill., Mich., Ohio, Ind., Mn.	230 S. Dearborn Chicago, Ill. 60604	Mr. Horst Witschonke (312/353-2202)
VI	N. Mex., Okla., Ark., La., Tex.	1202 Elm St. Dallas, Texas 75270	Mr. Mike Mendias (214/767-2742)
VII	Nebr., Kans., Iowa Mo.	1735 Baltimore St. Kansas City, Mo. 64108	Mr. Vincent Smith (816/374-3307)
VIII	Mont., N. Dak., S. Dak., Wyo., Utah, Colo.	1860 Lincoln St. Suite 900 Denver, Colo. 80295	Mr. Robert Simmons (303/337-2221)
IX	Calif., Nev., Ariz., Hawaii	215 Fremont St. San Francisco, Calif. 94105	Dr. Richard Proenier (415/556-4606)
X	Wash., Oreg., Idaho Alaska	1200 Sixth Avenue Room 11C Seattle, Wash. 98101	Ms. Deborah Yamamoto (206/442-1253)

### NOISE DOCUMENTS

The following "noise" technical documents, unless otherwise noted, are for sale by the *National Technical Information Service (NTIS), U.S. Department of Commerce, 425 13th Street, N.W., Room 620, Washington, D.C. 20004 (Phone: 202/296-4348)* or from the Superintendent of Documents, U.S. Government Printing Office (GPO) Washington, D.C. 20402 (Phone: 202/783-3238).

The documents are grouped into the areas of:

- Reports to Congress
- Health and Welfare
- Noise Monitoring
- Surface Transportation
- Aviation
- Construction
- State and Local Noise Control
- Federal Programs
- Household and Consumer Products
- Regional
- Other

**TITLE****NTIS DOCUMENT  
NO.****Reports to Congress**

Report to the President and Congress on Noise – December 31, 1971	PB-206716
Report on Aircraft-Airport Noise (Senate Document 93-8) – August 1973	AVAILABLE AT GPO
First Report on Status and Progress of Noise Research and Control Programs in the Federal Government – June 1975	PB-243447/AS Vol. I PB243448/AS Vol. II

**Health and Welfare**

Noise from Industrial Plants December 1971	PB-206718
Community Noise – December 1971	PB-207124
Effects of Noise on Wildlife and Other Animals – December 1971	PB-206720
Effects of Noise on People December 1971	PB-206723
Social Impact of Noise December 1971	PB-206724
The Effects of Sonic Boom and Similar Impulsive Noise on Structures December 1971	PB-206725
Economic Impact of Noise December 1971	PB-206726

TITLE	NTIS DOCUMENT NO.
Relation Between Daily Noise Exposure and Hearing Loss Based on the Evaluation of 6,835 Industrial Noise Exposure Cases - June 1973	AD-767204
A Scientific Basis for Limiting Noise Exposure for Purposes of Hearing Conservation - July 19, 1973	AD-767274
Prediction OF NIPTS Due to Continuous Noise Exposure July 19, 1973	AD-767205
Public Health and Welfare Criteria for Noise - July, 1973	PB-241000/AS
Proceedings of the International Congress on Noise as a Public Health Problem, Dubrovnik, Yugoslavia May 13-18, 1973	PB-241060/AS ALSO AVAILABLE AT EPA
Impact Characterization of Noise Including Implications of Identifying and Achieving Levels of Cumulative Noise Exposure - July 1973	PB-224408/AS
Information on Levels of Environmental Noise Requisite to Protect Public Health and Welfare with an Adequate Margin of Safety March 1974	PB-239429/AS
Summary of Above Document (in preparation)	
Population Distribution of the United States As a Function of Outdoor Noise Level - June 1974	PB-235022/AS

TITLE	NTIS DOCUMENT NO.
Federal Noise Effects Research: FY73-FY75 - March 1975	PB-241751/LK
Some Considerations in Choosing an Occupational Noise Exposure Regulation - February 1976	PB-251408
Noise at Work* Noise Around Our Homes*	AVAILABLE AT EPA
Measures of Noise Level: Their Relative Accuracy in Predicting Objective and Subjective Response to Noise During Sleep - February 1977	AVAILABLE AT EPA
Economic and Social Impact of Occupational Noise Exposure Regulations - March 1977	Being Processed by NTIS
Speech Levels in Various Noise Environments - May 1977	AVAILABLE AT EPA
Behavioral and Physiological Correlates of Varying Noise Environments - June 1977	AVAILABLE AT EPA
The Urban Noise Survey August 1977	AVAILABLE AT EPA
Comparison of Various Methods for Predicting the Loudness and Acceptability of Noise - August 1977	AVAILABLE AT EPA

\*Written especially for general public.

TITLE	NTIS DOCUMENT NO.
Noise: A Health Problem** (in preparation)	
Foreign Noise Research in Noise Effects -- January 1978	AVAILABLE AT EPA
<u>Noise Monitoring</u>	
Fundamentals of Noise Measurement Rating Schemes, and Standards December 1971	PB-206727
Standards and Measurements Methods, Legislation and Enforcement Problems, San Francisco, California September 27-29, 1971, Vol. IV*	AVAILABLE AT GPO
Evaluation of Commercial Integrating- Type Noise Exposure Meter December 1973	COM-74-104-77
The Design of a Low Cost Sound Level Meter -- April 1974	AB-783808
Guidelines for Developing a Training Program in Noise Survey Techniques July 1975 (Office of Naval Research)	AD-A01667
Procedures for Estimating Sound Power From Measurements of Sound Pressure -- July 1975 (NBS/NBSIR 75-652)	COM-75-11399
<u>Noise and Its Measurement**</u>	AVAILABLE AT EPA

\*EPA Public Hearings  
\*\*Written especially for general public.

TITLE	NTIS DOCUMENT NO.
<u>Surface Transportations</u>	
Transportation Noise and Noise from Equipment Powered by Internal Combustion Engines December 1971	PB-208660
Manufacturing and Transportation Noise (Highway & Air) - Chicago Illinois - July 28-29, 1971, Vol. II*	AVAILABLE AT GPO
Transportation Noise (rail and other); Urban Noise Problems and Social Behavior, New York, New York October 28-29, 1971, Vol. VI*	AVAILABLE AT GPO
Background Document for Interstate Motor Carrier Noise Emission Regulations - October 1974	PB-242554/AS
Environmental Noise Measurements on Interstate 57 During and After Truck Strike - June 1974 (USA Const. Engrg. Research Lab)	AVAILABLE AT EPA
Noise in Rail Transit Cars: Incremental Costs of Quieter Cars - June 1974	PB-234992/AS
Federal Surface Vehicle Noise Research, Development, and Demonstration Programs: FY73-FY75	PB-241887/LK
Passenger Noise Environments of Enclosed Transportation Systems June 1975	PB-245409/AS
Background Document for Railroad Noise Emission Standards December 1975	PB-251713

\*EPA Public Hearings

TITLE	NTIS DOCUMENT NO.
Background Document for Medium and Heavy Truck Noise Emission Regulations - March 1976	AVAILABLE AT EPA
NPRM on Special Local Determinations (Sec. 17 & 18) and Guidelines for State and Local Governments on the Filing and Processing of Applications for Preemption Waiver Determinations November 1976	AVAILABLE AT EPA
Noise and Recreational Vehicles*	AVAILABLE AT EPA
A Manual for the Review of Highway Noise Impact June 1977	Being Processed by NTIS
Comparison of Highway Noise Prediction Models - June 1977	Being Processed by NTIS
Background Document for Proposed Regulation of Truck Mounted Solid Waste Compactor - August 1977	AVAILABLE AT EPA
Background Document for Proposed Bus Noise Regulation September 1977	AVAILABLE AT EPA
Foreign Noise Research in Surface Transportation - December 1977	Available from EPA (MD-41) Research Triangle Park, North Carolina 27711
Background Document for Proposed Motorcycle Regulation - March 1978	AVAILABLE AT EPA

\*Written especially for general public.

**TITLE****NTIS DOCUMENT  
NO.**Aviation

The Effects of Sonic Boom and Similar Impulsive Noise on Structures December 1971	PB-206725
Legal and Institutional Analysis of Aircraft and Airport Noise and Apportionment of Authority Between Federal, State, and Local Government July 1973	PB-225149/4AS
Report on Operations Analysis Including Monitoring, Enforcement, Safety, and Cost - July 1973	PB-225150/2AS
Noise Source Abatement Technology and Cost Analysis Including Retrofitting - July 1973	PB-224422/AS
Review and Analysis of Present and Planned FAA Noise Regulatory Actions and Their Consequences Regarding Aircraft and Airport Operations - July 1973	PB-224405/AS
Military Aircraft and Airport Noise and Opportunities for Reduction Without Inhibition of Military Missions - July 1973	PB-223637/AS
Noise Measurement of Concorde 02 Approach and Takeoff at Dallas, Ft. Worth and Dulles International Airports - August 1974	PB-245156/AS

TITLE	NTIS DOCUMENT NO.
Civil Aviation Studies and Interagency Coordinating Organizations (Vol. I) December 1974	PB-239344/AS
Civil Aviation Studies and Interagency Coordinating Organizations (Vol. II) Appendices - December 1974	PB-239345/AS
Noise Certification Rule for Propeller Driven Small Airplanes, EPA Project Report - November 1974	AVAILABLE AT EPA
Minimum Altitudes for Noise Abate- ment, EPA Project Report November 1974	AVAILABLE AT EPA
Civil Subsonic Turbojet Engine- Powered Airplanes (Retrofit and Fleet Noise Level, EPA Project Report December 1974	AVAILABLE AT EPA
Aircraft Noise Certification Rule for Supersonic Civil Aircraft, EPA Project Report - January 1975	AVAILABLE AT EPA
Airport Noise Regulatory Process November 1976	AVAILABLE AT EPA
Federal Aircraft Noise Research, Development, and Demonstration Programs: FY73-FY-75	PB-244904/LK
Information on FAA Certification of Aircraft - January 1975	PB-242583/AS
National Measure of Aircraft Noise Impact Through the Year 2000 June 1975	PB-243522/AS

TITLE	NTIS DOCUMENT NO.
Noise Standards for Aircraft Type Certification (Modification to FAR Part 36) -- August 1976	PB-262401/AS
Department of Defense: Air Installation Compatible Use Zones (AICUZ) Program -- April 1977	PB-271441/AS
Calculation of Day-Night Levels (L <sub>dn</sub> ) Resulting from Civil Aircraft Operations January 1977	PB266165/AS
Airport Noise Abatement Planning June 1977	AVAILABLE FROM EPA
Foreign Noise Research in Aviation -- December 1977	Available from EPA (MD-41) Research Triangle Park, North Carolina, 27711
Federal Research, Technology and Demonstration Programs in Aviation Noise (in preparation)	

Construction

Noise from Construction Equipment and Operations, Building Equipment, and Home Appliances -- December 1971	PB-206717
Construction Noise -- Atlanta, Georgia July 8-9, 1971, Vol. 1*	PB-230064
Noise Emission Standards for Construction Equipment -- Background Document for Portable Air Compressors -- December 1975	PB-250430

\*EPA Public Hearings

TITLE	NTIS DOCUMENT NO.
Inflationary Impact Statement for Portable Air Compressors December 1975	AVAILABLE AT EPA
Foreign Noise Research in Machinery/ Construction Equipment December 1977	Available from EPA (MD-41) Research Triangle Park, North Carolina 27711
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