AL102601-397
AL-2788

CENTER FOR POLITICAL RESEARCH

RESEARCH REPORT

Federal Air Pollution Policy on Asbestos

Donald D. Kummerfeld
Director
CPR Research

June 1, 1971

CRMC-WKHER-000030

CPR Research

1730 M Street NW
Washington D C 20036
(202) 833-8200

A Division of
Center for Political Research
Publisher National Journal

INDUSTRIAL POLLUTION SERVICE

CLIENT REPORT

May 20, 1971

FEDERAL AIR POLLUTION POLICY ON ASBESTOS

Outline

		Page
I.	Summary	1
II.	Status--Air Pollution	2
	Outlook	2
III.	Asbestos as an Air Pollution Problem	5
	Requirements of the 1970 Clean Air Amendments	6
	Environmental Protection Agency (Office of Air Programs) Procedures	7
	Recent EPA Reorganization	9
	Current Congressional Attitude Towards Air Pollution Problems	10
	The Status of Scientific Research into the Effects, Control and Surveillance of Airborne Asbestos	11
	State and Local Air Resources Agencies	11
IV.	The Hazardous Air Pollutant Decision-Making Process	13
	Designating a Hazardous Pollutant	13
	Proposed Standards	16
	Final Standards	23
V.	Status--Occupational Safety and Health	23
	Outlook	23
VI.	Asbestos as an Occupational Safety and Health Problem	24
	Department of Labor	24
	Department of Health, Education and Welfare	29
	Occupational Safety and Health Review Commission	32
	Significance	32
	Other Agencies	32
	Standards	33
	Research	39
	Federal-State Relations	41
	Enforcement	42

Appendices

Appendix A	Organizational Charts	Environmental Protection Agency Bureau of Air Pollution Sciences Bureau of Stationary Source Pollution Control Division of Compliance
Appendix B	Philadelphia and New York Asbestos Control Proposals and Related Court Cases	
Appendix C	Biographies of Environmental Protection Agency Personnel	
Appendix D	President's Air Quality Advisory Board National Air Pollution Control Techniques Advisory Committee National Air Quality Criteria Advisory Committee	
Appendix E	Building Materials Sub-Council of the National Industrial Pollution Control Council	
Appendix F	Organizational Chart of the Occupational Safety and Health Administration	
Appendix G	Flow Chart of Decision-Making Process on Air Pollution Asbestos	
Appendix H	Pertinent Phone Numbers of Federal Officials	

INDUSTRIAL POLLUTION SERVICE

CLIENT REPORT

May 27, 1971

FEDERAL AIR POLLUTION POLICY ON ASBESTOS

I. Summary

Airborne asbestos is subject to regulation as an occupational safety and health problem as well as an air pollution problem. In 1970 Congress enacted new legislation that now governs both types of regulations.

The Clean Air Amendments of 1970 (P.L. 91-604) empower the Environmental Protection Agency (EPA) to designate and regulate hazardous air pollutants. On March 31, 1971, asbestos was listed as a hazardous air pollutant. Proposed standards for it will be issued by the EPA on or before September 27, 1971 and final standards will be promulgated by March 25, 1972. The standards will be effective on the date of promulgation against all new and modified sources of airborne asbestos and will become effective against existing sources 90 days later (June 23, 1972). The asbestos standards will vary with the type of source or use. At this time, there is no accurate estimate on the range in which the various standards will fall.

The 1970 Occupational Safety and Health Act (P.L. 91-596) delegated the responsibilities of administering its provisions jointly to the Departments of Labor and Health, Education and Welfare (HEW). The Department of Labor (DOL) has the standard setting responsibilities and is expected to publish a threshold limit value (TLV) list of airborne contaminants in late May, 1971. It will include an asbestos standard of 5 fibers/ml $>$ 5μ/in length. HEW is charged with health research and developing criteria for setting TLV's.

To date, there has been little or no contact between the air pollution and occupational safety, and health officials. No change in this situation is expected in the near future.

II. Status--Air Pollution

Outlook

The most significant upcoming development in airborne asbestos regulation will be the issuance by the Environmental Protection Agency (EPA) Office of Air Programs (OAP) of proposed regulations on or before September 27, 1971. This deadline will be met.

The regulations will be oriented to the different sources and uses of asbestos and, in some cases, will specify control techniques rather than emission standards. Spraying asbestos fireproofing is most likely to be regulated through control techniques. The control technicians at OAP are looking into six airborne asbestos sources with an eye toward regulation:

1) Spraying of fireproofing

2) Mobile sources, especially brake linings on motor vehicles

3) Disposal practices and demolition of buildings containing asbestos in its structure

4) Mining, especially in California

5) Milling

6) Asbestos-containing textiles

In addition, there is general concern in OAP with transportation of asbestos, especially in its freshly mined state. At present, neither the National Transportation Safety Board nor the Hazardous Materials Regulation Board (both within the Department of Transportation) have been contacted by OAP with regard to asbestos, so no study or regulation of the transportation of asbestos has begun.

At this point in time, it is meaningless to speculate at what levels OAP will set the asbestos regulations. Because of measurement and

surveillance difficulties coupled with the great variety of sources and particle size, asbestos control will be a complex technical and regulatory problem. OAP is also faced with conflicting medical evidence as to tolerable ambient air levels. However, it may be assumed that the most stringent regulations will be imposed on the spraying of fireproofing. Spraying is considered most dangerous because large concentrations of asbestos particles are emitted in heavily populated urban areas. These regulations could conceivably go as far as to ban asbestos spraying if no effective means of control could be devised to control the particulate emissions. However, OAP policy is to generally avoid bans whenever possible.

At present, OAP officials feel that well maintained fabric filters (baghouses) are relatively efficient for controlling emissions from factories and should be able to keep emissions below the proposed standards. Although many plants may be forced to overhaul or improve their fabric filter systems, it is not expected that high efficiency air filters, which are extremely expensive and impractical, will be needed.

Using buffer land as a control method is not now, and probably will not be, sanctioned by OAP. Asbestos particles, especially the smaller ones, can be picked up by air currents and carried far beyond the boundaries of any buffer land. Particles can filter into nearby rivers and streams after settling on the buffer land by seeping into subterranean waters during or after rainstorms. Finally, there is the question of ownership of the air above the buffer land. Since it is not owned by the buffer land owners, they do not have a free hand to pollute it.

As to enforcement, the OAP officials feel that they will bear the brunt of the responsibilities for hazardous air pollutants. The states will be heavily burdened with enforcing ambient and stationary source standards and will avoid the extra duties associated with regulating hazardous air pollutants. Only states with serious hazardous air pollution

problems or very well developed air quality control systems have shown any preliminary interest in enforcing these standards.

OAP does not expect to designate any other hazardous air pollutants until the three already being processed (asbestos, beryllium and mercury) are completed. The next listing, probably in mid-1972, will come from the following list:

1) cadmium

2) nickel

3) vanadium

4) chromium

5) polychlorinated biphenyl compounds

6) arsenic

7) manganese

At present the National Academy of Sciences is working on health effects reports for nickel, manganese, vanadium and chromium. The Office of Science and Technology of OAP has convened a panel to study cadmium, arsenic and polychlorinated biphenyls. These studies will, to a large extent, determine the next hazardous substances to be listed for the standard setting.

The relationship between air quality control and occupational safety and health is not well established because of the changes in legislation and internal reorganizations that have characterized the federal approach to these two fields in recent years. As a general rule, OAP's jurisdiction covers air that is outside the confines of a plant while the Department of Labor's Occupational Safety and Health Administration's (OSHA) jurisdiction is solely over air inside the factory. The OAP people feel that their standards should be stricter for two reasons. First, the public is subjected to out-of-plant air for 168 hours per week as

opposed to 40 hours per week for employees. Secondly, employees are screened so that no one can work in an asbestos plant unless he or she meets certain standards. The general public, on the other hand, includes cardiac cases and other people whose susceptibility to illness is greatly increased by exposure to asbestos or other hazardous pollutants. Up to this date, the contacts between OSHA, OAP and the Department of Health, Education and Welfare's National Institute for Occupational Safety and Health have been minimal.

The control technicians at OAP hope to publish, within a year, an authoritative document on asbestos control to go along with the recent National Academy of Sciences study on asbestos health effects. At present, they are more than willing to listen to and consult with industry in order to improve airborne asbestos control.

The Bureau of Stationary Sources Pollution Control (which does the staff work on asbestos standards) does not expect to see its proposals significantly altered by the upper echelon of OAP or the EPA hierarchy. Most influence to change the standards will be exerted between the time the standards are proposed (Sept. 27, 1971) and the date of promulgation (March 25, 1971). But, even then, the OAP, Bureau of Stationary Sources Pollution Control, staff feel that their proposals will remain generally intact. These proposals on standards and control techniques have not yet been produced.

III. Asbestos as an Air Pollution Problem

Viewing the regulation of airborne asbestos from an air pollution standpoint necessitates an understanding of the following:

1) The requirements of the 1970 Clean Air Amendments,

2) The procedures instituted by the Office of Air Programs (OAP) of the Environmental Protection Agency (EPA) to meet the requirements of the 1970 Clean Air Amendments,

3) The effects of recent EPA reorganizations,

4) Current congressional attitudes toward air pollution problems,

5) The status of scientific research into the effects, control and surveillance of airborne asbestos,

6) The treatment given airborne asbestos by state and local air resource agencies.

Requirements of the 1970 Clean Air Amendments

Section 112 of the 1970 Act spells out the requirements for setting and enforcing "National Emission Standards for Hazardous Air Pollutants." It requires the Administrator of EPA to list hazardous air pollutants within 90 days of the December 31, 1970 enactment date. The EPA did list asbestos, beryllium and mercury on March 31, 1971 in the Federal Register. From the date of listing, the EPA has 180 days to prescribe proposed emission standards for each pollutant. These will be issued on or before Sept. 27, 1971.

In addition to the proposed regulation, OAP will also issue proposed guidelines. These will define the information that must be provided to OAP by the hazardous pollutant source. The guidelines, which may be issued prior to the proposed regulations, will be split into two classes. One class will govern new or modified sources and will require that plans and specifications be submitted in order to permit OAP to conduct a pre-construction review. The second class will deal with existing hazardous air pollutant sources. It will not be as extensive as the other type. It will serve as the basis for a registration and surveillance system. These guidelines will be subject to review until they are made final on or before the date of promulgation of hazardous air pollutant standards.

The 1970 Act states that issuance of proposed standards must be made together with a notice of a public hearing within thirty days. The comments made at such hearing will be considered by the Administrator of

EPA who may find that the pollutant in question does not warrant a hazardous designation. If, however, he still consideres the pollutant hazardous (there is practically no possibility that asbestos will be reconsidered and withdrawn from the hazardous list) he has 180 days from the date of issuance of the proposed standards to promulgate final standards. This should fall on or before March 25, 1972.

Once standards are promulgated, they become effective immediately for new sources and for sources with modification plans. The standards are applicable to existing sources 90 days after promulgation. Therefore, new and modified sources will be subject to prosecution for violation of the standards as soon as they are promulgated (March 25, 1972) and existing sources will become liable on or before June 23, 1972.

Although the Act provides a procedure by which states may assume responsibility for enforcing the hazardous air pollutant standards, few, if any, are expected to do so. Federal enforcement is the responsibility of the Bureau of Stationary Sources Pollution Control in OAP and the Office of Enforcement in EPA. The Administrator is empowered to issue compliance orders requiring violators to comply with the standards within 30 days. Unlike orders for violations of ambient or stationary source standards, the order is effective immediately when issued for hazardous air pollutant violations. The Administrator may also bring civil and criminal actions. Civil actions may include permanent or temporary injunctions. Criminal actions carry with them fines of up to $25,000 per day and/or one year imprisonment for the first conviction and $50,000 per day and two years imprisonment for subsequent convictions.

Environmental Protection Agency (Office of Air Programs) Procedures

Passage of the Clean Air Amendments has caused OAP and EPA to hastily set up a lengthy decision-making process for hazardous air pollutant regulation. This system has been recently changed and is subject

to further change, but certain general principles and directions have been established that appear stable. (A detailed analysis of the decision-making process appears in Section IV).

The decision-making process consists of three steps: 1) listing the hazardous pollutant; 2) issuing proposed standards and control guidelines; and 3) promulgation of final standards.

1) The process will always begin with research into the health effects of an air pollutant. This research has been conducted by outside contractors or by the Office of Air Pollution in its North Carolina Research Triangle complex. Under the new reorganization, supervision of major research and development functions has been transferred to the Assistant EPA Administrator for Research and Monitoring, Dr. Stanley Greenfield. Once the research has been analyzed by the air pollution scientists in North Carolina and found to be sufficient to warrant hazardous air pollutant treatment, the recommendations are sent to the office of the Assistant Administrator for Air Programs, John Middleton. These recommendations are generally accepted in the OAP administrator's office and at higher levels in EPA.

After it approves them, the OAP forwards the recommendations for hazardous designation to EPA. EPA Offices of Enforcement, General Counsel, Media Programs and Research and Monitoring examine the recommendations cursorily and forward them to Administrator Ruckleshaus for his signature. The hazardous pollutant is then listed in the Federal Register.

2) Once the designation of the hazardous pollutant is made, the process repeats itself to some extent in establishing the proposed standards for that pollutant. First the scientists in North Carolina assess health, economic and control technology considerations and make recommendations on proposed standards and control guidelines. These are forwarded to the OAP Administrator's Office in Washington. His office, if it approves the proposed standards and the control guidelines, forwards them to the same offices

of EPA that reviewed the proposed listings. They, in turn, shuttle the reviewed proposals to the Administrator of EPA for final approval before publication in the Federal Register.

3) The final standards are funnelled through the same procedure as the proposed standards. As a general rule scrutiny is greatest immediately prior to the setting of final standards. Most outside organizations will make their input in the period between standards proposal and promulgation of standards. During this period (September 26, 1971-March 25, 1972) the standards and policies will be subjected to the greates changes. Once the standards are signed by the Administrator of EPA and published in the Federal Register, they become effective.

Recent EPA Reorganization

The May 4, 1971 EPA reorganization (Appendix A, EPA Organization Chart) dealt mainly with higher echelon positions and the status of regional offices. The changes and effects upon the air pollution program are the following:

1) The Office of Air Pollution is now under the supervision of Assistant Administrator for Media Programs Donald Mosiman. Dr. John Middleton will remain as head of the Office of Air Programs.

2) Authority to oversee all air pollution research was transferred to Assistant Administrator for Research and Monitoring Dr. Stanley Greenfield.

3) The reorganization will result in a tremendous loss of productive man-hours. Much effort has been spent on reorganizing rather than on air pollution control work. This may inhibit EPA's review of the proposals for hazardous air pollutant standards forwarded by the Office of Air Programs. Consequently, OAP's proposals will probably be approved with no major adjustment.

4) The 10 regional offices of OAP will no longer be separate from the EPA regional offices. All types of pollution will now be regulated and administered out of EPA offices with subdivisions for air, water, solid waste, pesticides, and radiation. Air pollution officials feel that there will be a loss of identity and autonomy as a result of the consolidation of the various programs. They feel that the regional offices will be directly responsive to the Administrator and his immediate priorities and that air pollution problems may get lower priorities.

Besides functional reorganization, EPA is attempting to consolidate its Washington, D. C. staff into one location. Many offices are expected to move this year to a central location in Washington. These offices have been physically moved and functionally reorganized several times in the past five years. All previous relocation and reorganization will be as the previous moves, disruptive and energy consuming.

Current Congressional Attitudes Towards Air Pollution Problems

Federal air pollution statutes should be considered stable and not subject to change in the near future. Congress devoted a great deal of time and energy to the Clean Air Amendments it enacted on December 31, 1970 and now has turned its attention to the problems of water pollution.

Up to this point, administration of the Clean Air Amendments has gone fairly smoothly and no major flaws have been discovered. No major push for further amendments has surfaced.

One area of possible congressional change affecting air pollution is the jurisdiction of congressional committees over pollution problems. At present, the Senate's environmental legislation is usually sent to the Public Works Committee, which then assigns it to its Subcommittee on Air and Water Pollution. The subcommittee is chaired by Senator Muskie

(D-Maine). In the House, a number of committees split the environmental legislation.

There is a resolution pending that will create a Joint Committee on Environment. It has passed the Senate already and will be voted on by the House shortly. The ramifications of this proposal, if passed, can not yet be assessed, but it should act to clear up the overlapping jurisdictions in the House and may lead to more efficient administration of environmental legislation.

The Status of Scientific Research into the Effects, Control and Surveillance of Airborne Asbestos

In recent years, extensive research establishing a link between airborne asbestos and various health hazards has been compiled. In addition, the OAP has contracted for and just received a study from the National Academy of Sciences consolidating much of the health effects evidence. It concluded that "although the different types of asbestos differ in their biologic effects, no type can be regarded as free of hazard." OAP is so confident of the extensiveness of the health effects research that it no longer is conducting or sponsoring research of this type.

Research into control techniques and surveillance methods is still being conducted. A study entitled "Control Techniques for Asbestos Emissions" is due to be completed by July 1 and a project entitled "Development of a Rapid Survey Method of Sampling and Analysis for Asbestos in Ambient Air" is expected to be completed soon after. OAP is about to let a short duration contract for a study to develop information and control techniques.

State and Local Air Resources Agencies

For the most part, state and local agencies have been waiting for the federal government to take the lead in asbestos regulation. There

has, however, been some public outcry for asbestos regulation on a state and local level and the agencies that have gone ahead and imposed restrictions have met with favorable reaction locally and nationally.

The two most notable agencies to take asbestos restrictions upon themselves are the Air Management Service of Philadelphia's Public Health Department and the Department of Air Resources of the City of New York.

Philadelphia: In late 1970, Philadelphia announced that it would stop issuing asbestos spraying permits due to the inability of contractors to institute effective effective control methods. This restriction has been erroneously reported to be a ban. Philadelphia's Board of Health is now in the process of adopting a regulation to ban asbestos. The Board has held hearings on airborne asbestos regulation and is now reviewing the information presented at the hearings. Philadelphia's air pollution officials are very concerned with asbestos pollution occurring during demolition of buildings and has appointed an ad hoc committee to study the problem.

New York: New York City's Air Resources Bureau has presented legislation to the City Countil requesting a ban on spraying asbestos. They hope that the Council will act on the measure within a month and expect passage. The city already has a permit system for spraying asbestos and demolition of buildings. The Commissioner of Air Resources has issued a "Commissioner's Order" setting out control methods to be used when asbestos spraying is permitted. To handle disposal problems, two landfill areas have been designated as approved sites for disposal of "asbestos contained materials."

In both cities, legal action to deny the right of the city to restrict or ban asbestos spraying has been rejected by the courts.

The significance of these two programs lies in their being used as models for other cities and states. Similar programs in other localities are expected. If these programs spread to demolition controls, they may

establish a trend toward multi-use restrictions of asbestos, especially in urban areas. (Copies of the court cases, the city regualtions, a Philadelphia study on asbestos spraying and the pending proposals are included in Appendix B.)

IV. The Hazardous Air Pollutant Decision-Making Process

The process* of regulating an air pollutant through the hazardous air pollutant section (112) of the 1970 Clean Air Amendments can be divided into three steps. In the first step, an air pollutant is designated hazardous by the Administrator of the Environmental Protection Agency. The second step consists of a 6-month period dating from the listing of the hazardous air pollutant in the Federal Register to the publishing of proposed standards and guidelines in the Federal Register. The last step in the decision-making process includes public comment and hearings, all necessary revisions of the standards and final publishing of control guidelines and standards. From that point, the federal and state governments become empowered to enforce the promulgated standards.

Designating a Hazardous Pollutant

The Office of Air Programs (OAP): The OAP bureau most responsible for designating air pollutants as hazardous is the Bureau of Air Pollution Sciences (formerly the Bureau of Criteria and Standards). It is headed by Dr. Delbert Barth, aided by Associate Director Dr. Ronald Engel and Assistant Director Dr. Jack Thompson. Dr. Engel was liaison officer on an airborne asbestos study conducted by the National Academy of Sciences and Dr. Thompson has been project officer for much of OAP's contract

*The biographies of the significant people mentioned in this section are listed in Appendix C in alphabetical order. In addition, the biographies of three other air pollution officials with some possible relation to the asbestos decisions are included.

research on airborne asbestos. The bureau headquarters are located in the North Carolina Research Triangle offices of OAP. (See Appendix A for Organization Chart.)

The primary responsibilities of the Bureau of Air Pollution Sciences are to develop lists of pollutants for consideration under the various sections of the air pollution statutes and to demonstrate their effects on health and welfare. The listings are made pursuant to the bureau's assessment of scientific research conducted through its own grants and contracts and through analysis of independent studies. Generally, the bureau will gather a committee together from the National Academy of Sciences to conduct a study of the health effects of an air pollutant before it goes forward with plans to list it as a hazardous substance. This report will attempt to consolidate all known research on the health effects of the pollutant and make conclusions and recommendations as to the pollutants involved and possible actions to be taken. Such a report has recently been completed on asbestos.

Once the bureau has decided on a number of pollutants for possible designation as hazardous air pollutants, it submits them to the National Air Quality Criteria Advisory Committee. This committee, authorized under Section 110(d) of the 1967 Air Quality Act, meets periodically to discuss air pollution problems and to evaluate the determinations made by the bureau. The committee is composed of 14 scientists from private industry, air pollution control agencies and academic institutions. The committee is chaired by Dr. Barth. EPA intends to add an "environmentalist" to it this year. Appointments to the committee last three years and are made by the Administrator of EPA (see Appendix D for a roster of its members).

In anticipation of the passage of the 1970 Air Amendments, the Bureau of Air Pollution Sciences had developed a list of four hazardous air pollutants for consideration by the committee. The pollutants

were mercury, beryllium, asbestos and cadmium. It was decided that the scientific research on cadmium was insufficient to warrant designation, but the other three were judged to be hazardous by the committee.

The Assistant Administrator of OAP's Office: From this point, the Bureau of Air Pollution Sciences recommended the designation of the three pollutants to the office of Dr. John Middleton, head of OAP. Along with the recommendations, the bureau submits evidence of the pollutants' toxicity, persistence in the environment, environmental and occupational exposure. The Office of Standards Development, which is part of the bureau director's office, is instrumental in examining and substantiating the recommendations. It is headed by Orin Stopinski.

As a general rule, as air pollution recommendations are forwarded upward toward the Administrator's office, the degree of expertise of the reviewers decreases. For the most part, recommendations by the lower echelon but better informed scientific personnel have been and will continue to be approved without questions being raised of a sophisticated scientific nature. So far, this has been the case with the hazardous pollutant listing and for the ambient standards promulgated on April 30. There are, however, certain personnel and offices that examine the recommendations closely and are properly backgrounded to make significant comments and changes.

When Middleton's office gets the recommendations of the Bureau of Air Pollution Sciences, three assistant directors take particular notice. Dr. John Ludwig, who heads up the Office of Science and Technology, is the major scientific analyst, while Edward Tuerk and Irwin Auerbach examine them from legislative and administrative viewpoints. Once they have examined and approved them, Dr. Middleton makes a final assessment and, unless he has some objection, signs and passes them along to the EPA's Assistant Commissioner for Media Programs.

EPA: At the EPA level a number of offices pass on the recommendations before final approval by the Administrator. Listing of hazardous pollutants does not get as close scrutiny as proposed or final regulations. Many offices will give them little more than a cursory look.

Proposed Standards

Setting Proposed Regulations: After EPA Administrator Ruckelshaus signs the proposals, the hazardous air pollutants are listed in the Federal Register and the key OAP office becomes the Bureau of Stationary Sources Pollution Control. From this point, the Bureau of Air Pollution Sciences is relegated to a supporting role. The Bureau of Stationary Sources Pollution Control is also headquartered in OAP's North Carolina complex. It is headed by Dr. Bernard J. Steigerwald, assistant director Sheldon Meyers and assistant to the director Thomas Yost. Of its three divisions, the Compliance Division plays the major role in determining the regulations of asbestos and other hazardous air pollutants. (See Appendix A for organization charts.)

The Division of Compliance is split into branches and then into sections. At present, research on control systems and feasible emission regulations for asbestos is being conducted by the National Emission Standards Development Section of the Source Control Branch. This section is run by Dale M. Slaughter and the asbestos research is being handled by C. Russell Horres, Naum T. Georgieff and James Crowder.

Mr. Horres is project officer for a soon-to-be completed OAP contract with IIT Research Institute in Chicago to develop air pollution control technology for asbestos. The report will state, among other things, that although the technology for measuring and identifying airborne asbestos is available, cost problems exist and no satisfactory techniques exist now that are applicable for all airborne asbestos control purposes. In measuring the concentration of asbestos pollution, the light microscope, which is used in most cases now, can not pick up the smaller particulates

that are equally hazardous to health and the electron microscope is too expensive to be used on a large scale. Therefore, OAP can not speculate at the range in which the asbestos regulations will fall at this time.

The National Emission Standards Development Section's objective is to propose hazardous air pollutant standards based upon control technology. It develops this standard from in-house and contract research on control methods. The proposed standard will be forwarded to the Source Control Branch which has a separate responsibility for hazardous air pollutants. This branch, headed by Robert Walsh, is responsible for devising source control guidelines for facilities emitting hazardous pollutants as well as approving and forwarding the standards proposed by the National Emission Standards Development Section. The source control guidelines spell out the information that industry must furnish OAP concerning emissions of hazardous pollutants from new and modified plants and from existing sources. Guidelines haven't been developed yet but in all likelihood, the new and modified sources will be subjected to some type of pre-construction review based upon plans and specifications submitted to the OAP. For existing sources, guidelines will require registration and a surveillance system. These guidelines will be issued between August and October, 1971, and will be subject to revision until final promulgation of hazardous air pollutant regulation by April, 1972. The information demands upon new and modified sources are expected to be much more extensive than those for existing sources. The feeling at OAP is that they will take what they can get from existing sources.

The proposed guidelines and the proposed standards from the control technology standpoint are delivered to the office of the director of the Bureau of Stationary Sources Pollution Control. The bureau also receives a support document on health effects of the hazardous pollutant from the Bureau of Air Pollution Sciences and an assessment of the economic effects of the pollutant and its control from the Office of Economic Evaluation.

The Office of Economic Evaluation is within the Bureau of Air Pollution Sciences. It functions with great autonomy and its documents on hazardous air pollutants go directly to the Bureau of Stationary Sources Pollution Control. The office has a staff of 11 headed by John O'Connor. The staff is composed of economists, engineers (some with MBA's) and financial analysts. It reports on the economic damage done by pollutants and the relative cost of control, industrial profits and the economic burden of controlling pollution that industries should meet, supply of and demand for pollution control devices and the extent of federal role in abating air pollution. The office does this work for all categories of pollutants and also contributes economic analysis to the annual environmental quality report that Congress receives. A newly formed Industrial Studies Group within the Bureau of Stationary Sources Pollution Control will do some of the research into costs and controls, but the analysis function will remain in the Office of Economic Evalution.

The regulations ultimately proposed by the Bureau of Stationary Sources Pollution Control are arrived at by weighing control technology, health effects and economic considerations. The intent of the bureau is to find the emission level that both eliminates the health hazards and is capable of being achieved through methods of control and surveillance that are both reliable and economically feasible. In addition, the director's office must reconcile all proposals with the authority given by the air pollution statutes and must consider the enforceability of the proposals. This bureau is also responsible for enforcement. These latter two tasks are the responsibility of Thomas Yost who is the only attorney employed by OAP in North Carolina.

Before making a decision on proposed regulations, the bureau meets with the National Air Pollution Control Techniques Advisory Committee. (See Appendix D for a roster.) This committee, like the previously

mentioned National Air Quality Criteria Advisory Committee, arose under the 1967 Air Quality Act, has 14 members from industry, government and academic institutions and reviews the decisions of the bureau. It is expected to meet to discuss the proposed hazardous pollutant regulations late this summer. This committee has been outspoken in past meetings and its assessments have been influential.

Deputy Assistant Administrator of OAP: Once the proposed standards have been determined, the proposal follows a path similar to the route taken by the recommended hazardous air pollutant listings. The bureau forwards them to OAP headquarters in Washington and then they are sent through the EPA. The difference is that greater scrutiny is given to the recommendations for the proposed standards and even greater scrutiny will be given to the recommended final regulations.

Deputy Assistant Administrator Middleton's office receives a briefing memo along with the proposed regulations from the Bureau of Stationary Sources Pollution Control. There are no scientific personnel with experience in airborne asbestos in Middleton's office so the only scientific review at this level of OAP will come from Dr. Ludwig's staff in the Office of Science and Technology. After examination and expected approval by Middleton's assistants Tuerk and Auerbach, Middleton will make OAP's final assessment then and approve and forward the proposed regulations to the EPA.

Outside Agencies: At various points in the upper-echelon review of the hazardous air regulation, recommendations from government bodies outside the EPA exert some influence period between the proposed regulations and final promulgation will probably see the greatest changes and the most pressure. This period includes provision for public hearings and comment and affords interested groups and public agencies ample time for comment. Most prominent are the Council on Environmental Quality

(CEQ), the Office of Science and Technology and the National Industrial Pollution Control Council (NIPCC). Other government agencies, such as the Atomic Energy Commission, Department of the Interior, Department of Health, Education and Welfare, the Federal Trade Commission and the Food and Drug Administration may intercede if the pollutant to be regulated has some particular connection to their jurisdiction. The Office of Science and Technology, CEQ, and NIPCC are the agencies most likely to provide input on asbestos.

The Council on Environmental Quality was created on January 1, 1970 as part of the National Environmental Policy Act (42 USC 4321 et seq.). It is the most powerful of the outside bodies and can enter into the decision-making process at any level. CEQ has direct access to the President and the Administration of EPA. Among CEQ's responsibilities are the development and evaluation of environmental policy, the review of environmental policy statements from all agencies, and the arbitration of different agency policies on the environment. The head scientist in CEQ is Dr. Gordon J.F. MacDonald, who would be behind or at least support any interjection of CEQ views into determination of hazardous air pollutant standards. CEQ staff members with the best air pollution background are Roger Strelow and Terry Davies. At present, CEQ is vastly understaffed and would devote significant effort to controversies not involving inter-agency problems only if it felt some great injustice was occurring. This is not likely to happen with the setting of airborne asbestos standards.

The Office of Science and Technology (OST) (not to be confused with an office of the same name within OAP) was established in the executive office of the President by Reorganization Plan #2 of 1962. Its purpose is to keep the President informed on scientific developments and the adequacy of the science resources available to the government. It is also responsible for insuring that a good scientific base stands behind science-related decisions. It officially reports solely to the President but does have some indirect contact with EPA. The OST strength lies in avoiding visibility, consequently its exact influence is difficult to determine.

In all probability, its role in hazardous air pollutant decisions is minor. Dr. Berger and Dr. Buckley handle OST's environmental work.

The National Industrial Pollution Control Council was established on April 9, 1970. It is composed of 230 top American businessmen and split into 30 sub-councils to study the environmental problems of specific industries. Asbestos is encompassed by the uilding Materials Sub (See appendix E for a roster). It has met only twice, has not discussed asbestos and has no meetings scheduled. NIPCC has no formal direct contact with EPA and must work through the Secretary of Commerce. The Secretary can go to CEQ or the Administrator of EPA with NIPCC recommendations. NIPCC and its sub-councils do have direct informal ties with EPA. The executive secretary of the Council is Walter Hamilton.

EPA: Due to the recent reorganization in EPA and the newness of the organization, the responsibilities of most offices are not yet sufficiently defined, routing of proposals is not well established and further organizational changes can be expected. Despite the organizational confusion, certain EPA level offices can be counted on to review all hazardo air pollutant proposals.

At the point where OAP forwards its proposed regulations to EPA, a pattern develops during which the proposals are at first farmed out to a number of people and offices and are then brought to a central point in the office of Richard Fairbanks, a special assistant to the Adminstrator. The proposals will be reviewed by the Media Programs Office, the Research an Monitoring Office, the Office of Enforcement and the Office of the General Counsel.

The Office of Air Programs has been placed under the auspices of the Assistant Administrator for Media Programs, Donald M. Mosiman. In addition, the May 4, 1971 reorganization of EPA transferred the responsibili for setting standards from the Office of Enforcement of EPA to Mr. Mosiman's office and OAP. Because of the direct contact of OAP to the Media Programs

Office, the change in standard setting responsibility may result in closer adherence to OAP recommendations.

The Research and Monitoring Office is headed by Assistant Administrator Dr. Stanley Greenfield. His office is responsible for scientific evaluation of proposals. The office is composed mostly of scientific generalists whose experience does not run to airborne asbestos. They are mostly concerned with reconciling major research efforts to reasonably drawn conclusions.

The Offices of Enforcement and General Counsel are both under the Assistant Administrator for Enforcement and General Counsel, John Quarles, Jr. The Enforcement Office must consider the ramifications that the proposals would have if promulgated and guard against promulgation of impractical unenforceable regulations. In that office, George Allen is Deputy Assistant Administrator for air and Richard Wilson is also a specialist in air pollutant problems. Because of the great variety of asbestos uses, sources and particulate sizes and because of control technology and monitoring questions, the review given by the Enforcement Office of the proposed and final regulations should be particularly significant.

The General Counsel's office is responsible for fitting the proposals within the statutary guidelines and authority and for rewriting the proposals into statutory language. The legal counsel in that office specializing in air poilution is Robert Baum.

The reviews and comments of all the named offices are sent to Richard Fairbanks, who is the Administrator's special assistant specializing in air pollution. He consults with the offices to iron out contradictions and other differences and ultimately presents a final recommendation and briefing to Mr. Ruckleshaus for his signature. It is unlikely that the Administrator will reject or make significant alterations in the final recommendations since he does not have a background in air

pollution science or asbestos hazards. If he goes outside his agency for consultation, it would probably be to CEQ or the President's Office of Science and Technology.

Final Standards

Promulgated Regulations: The process involved for final regulations is virtually identical to the proposed standards procedure. The only difference is that after the proposals are published, public hearings must be held. The evidence presented will then be assessed along with other feedback by the Bureau of Air Pollution Sciences and Stationary Sources Pollution Control. These offices will review comments on the proposed standards and make revisions. The final standards proceed through the same offices and approval patterns that the proposed standards followed. The result is final regulations published in the Federal Register by March 25, 1972.

V. Status - Occupational Safety and Health

Outlook

The formal implementation of the 1970 OSH Act is being carried out with dispatch in the Labor Department, less so in HEW. In the short run this may lessen interest in the control of airborne asbestos because Labor is emphasizing industrial safety rather than health standards. HEW, although less organized than Labor, has shown great interest in asbestos pollution and its Bureau of Occupational Safety and Health (BOSH), researchers are developing a criteria document for asbestos. In addition, the Threshold Level Value (TLV) list will soon include a standard for asbestos (5 fibers/ml 5 in length) that is more rigorous than the previous regulation of 12 fiber/ml. This standard is expected to be issued in late May or early June, 1971.

With public concern over asbestos-related health hazards at an all-time high, it is possible that the imminent danger provisions of the Act may be invoked in some asbestos plants. However, these provisions can not be used until the interim airborne asbestos standards are in effect.

These standards will go into effect 90 or 270 days (depending on the wording of the TLV's) after the date of their issuance (late May, 1971). It is not likely that the provisions for immediate hazard situations, which may be utilized even before standards are promulgated, will be used to combat airborne asbestos.

White House interest in the subject has sharply declined following enactment of the law. Congressional concern will be keen, particularly in the Senate where strong industrial health measures are favored by members of both parties. Considering the early stages of the new agencies, there is already concern that politically-visible steps may be needed to assure that the Labor Department not neglect the development and enforcement of health standards. Advisory committee investigations into some industries (e.g., metallic and non-metallic mining) and substances (e.g., exposure to lead) can be expected. The EPA is overburdened with its own problems of reorganization and implementation of its own responsibility and has not yet involved itself with occupational safety and health.

VI. Airborne Asbestos as an Occupational Safety and Health Problem

In 1970 Congress enacted the Occupational Safety and Health Act. The Act, which became effective on April 28, 1971, is administered by both the Department of Labor and the Department of Health, Education and Welfare (HEW). To handle its responsibilities under the Act, the Department of Labor (DOL) created the Occupational Safety and Health Administration (OSHA) under the leadership of George C. Guenther, Assistant Secretary of Labor for Occupational Safety and Health. HEW intends to create the National Institute for Occupational Safety and Health (NIOSH) to handle its functions.

Department of Labor

Primary responsibilities placed in the department by the 1970 Act include:

1) Standard-setting, variations, tolerances and exemptions;

2) Establishment of priorities for standards;

3) Enforcement, inspections and citations;

4) Grants to states and approval of state plans;

5) Record keeping for enforcement or statistical purposes;

6) Record keeping for occupational injuries, illnesses;

7) Training of inspectors; and

8) Educational and prevention programs aimed at employers and employees.

Four organizational provisions were contained in the Act:

1) Assistant Secretary of Labor for Occupational Safety and Health

2) Occupational Safety and Health Administration (OSHA)

3) National Advisory Committee on Occupational Safety and Health (NACOSH)

4) Advisory committees for standards setting process (optional)

OSHA: OSHA is to consist of three central parts: Office of Operations, (with an evaluation arm in the Office of Policy Development), Management offices, and the Regional and area offices (see appendix F - for occupational chart).

Office of Operations will be directed by Robert D. Gidel (former deputy director, Bureau of Labor Standards). Operations has four subdivisions covering Labor's primary responsibilities under the Act:

1) Office of Safety and Health Standards - Patrick F. Cestrone (former chief, Office of Standards Development, Bureau of Labor Standards)

2) Office of State Programs - Thomas C. Brown (former director, Office of Program Development, Workplace Standards Administration)

3) Office of Compliance - Eugene L. Newman (former chief, Office of Training, Bureau of Labor Standards)

4) Office of Training and Education - Dr. Earl D. Heath (National Highway Traffic Safety Administration)

The Office of Policy Development (headed by Albert J. Angebranndt, former deputy director, Office of Management Systems, Office of Financial Management, Manpower Administration) will work closely with Operations Director Gidel to develop recommendations from the program offices and legislative and policy reports on the basis of experience with the Act.

Management offices will consist of three elements:

1) Office of Program Management Services - Barry J. White (former director, Office of Management Systems and Services, Workplace Standards Administration)

2) Office of Management Data Systems - (vacant)

3) Office of Information Services - Robert Resor (former special assistant, National Railway Labor Conference in Washington)

Ten regional offices will be established, each with staff for compliance, state programs (administrative services and technical support programs). Forty-three area offices will be structured more to deal with standards-oriented programs--with construction, maritime and general industry subdivisions in each office. (See Appendix F for regional officials and offices.)

NACOSH: The Secretary of Labor is to appoint a 12-member National Advisory Committee on Occupational Safety and Health (NACOSH) with four members designated by the Secretary of HEW. Members are to be chosen from management, labor, occupational safety, and occupational health professions and from the public. One of the public representatives is to be named by the Secretary as chairman; NACOSH must hold public meetings at least twice a year.

The Secretary's existing National Safety Advisory Committee probably will be reconstituted as NACOSH. Thirteen safety experts from management, labor and the public currently advise the Secretary on new standards. The mandate for NACOSH is vague, indicating that it will provide general

public review of overall Labor-HEW administrative problems rather than continue the functions of the Secretary's Advisory Committee. Personnel adjustments in NACOSH will make room for the four HEW-designees and transfer the emphasis on standards-review responsibilities to the advisory committees.

Appointments to NACOSH are expected shortly. Current Safety Advisory Committee members are:

Chairman: Howard Pyle, president, National Safety Council

Public members:

Dr. Clyde Berry, chairman, division of environmental and health engineering, College of Medicine, University of Iowa

Dr. John Grimaldi, director, Center of Safety, New York University

Jack F. Hatton, chief, division of industrial safety, California Department of Industrial Relations

Donald Peyton, managing director, American National Standards Institute

Labor members:

Walter J. Burke, secretary-treasurer, United Steelworkers of America

Arthur P. Gildea, secretary-treasurer, International Union of United Brewery, Flour, Cereal, Soft Drink and Distillery Workers of America

Elwood Swisher, vice president, Oil, Chemical and Atomic Workers International Union

George H.R. Taylor, economist, department of research, AFL-CIO

Management members:

Dr. Lester V. Cralley, director, industrial hygiene, Aluminum Co. of America

J.S. Queener, manager, safety and fire protection division, E.I. DuPont de Nemours & Co., Inc.

Albert W. Turner, supervisor, employee relations, Southern California Gas Company

Frank R. Barnako, manager, safety and workmen's compensation division, Industrial Relations Department, Bethlehem Steel Co.

Advisory committees on standards may be appointed by the Secretary of Labor. None are currently anticipated (in the immediate future) by OSHA. When named during the next two years, the advisory committees will review all other possible federal standards as a federal consensus mechanism rather than the former provate review mechanisms of the American National Standards Institute, Inc. or the National Fire Protection Association. Thus, the "consensus" system will be applied by DOL advisory committees to proprietary or professional standards currently not incorporated in federal regulations.

Significance: Major accommodations have been made by the Labor Department to carry out the 1970 Act through OSHA:

1) Separation of operations and administrative functions, providing a high priority for Labor's four major areas of responsibility.

2) Upgrading of policy development from a research/evaluation "study" level to the operations level, in preparation for reviews, report and legislative changes.

3) Establishment of a compliance office, separate from regional and standards-setting functions, to concentrate on enforcement.

4) Establishment of regional offices as mini-bureaus with special capabilities for compliance, state plans, and technical assistance direct at the local level.

It is not clear whether Labor is merely shuffling Bureau of Labor Standards into a new title rather than into a new policy position. Six of eight appointments are personnel from either Bureau of Labor Standards or Workplace Standards Administration. In addition, two other areas of OSHA jurisdiction (legal enforcement and data systems) are to be handled outside of the administration itself:

Associate Solicitor for Occupational Safety and Health- Benjamin W. Mintz (former special assistant to the solicitor, DOL)

Associate Commissioner of the Bureau of Labor Statistics for Occupational Safety and Health--Thomas McArdle (former Bureau of Labor Statistics Regional Director, Chicago)

Department of Health, Education and Welfare

Primary responsibilities placed in the department by the Act include:

1) A new National Institute for Occupational Safety and Health (NIOSH) with a broad mandate for extensive research programs, assisted by research and demonstration grants;

2) Development and recommendation (but not setting) of health standards;

3) Compilation and annual revision of lists of all known toxic substances, including toxic concentrations;

4) Regulation of medical examinations or tests to determine frequency or occupational illness or susceptibility;

5) Manpower development (but not inspectors) including training grants;

6) Information on protective equipment; and

7) Annual publication of research criteria.

NIOSH: The chief organizational response to the 1970 Act is the establishment of the National Institute of Occupational Safety and Health (NIOSH). The Institute is the key to implementing most of HEW's responsibilit under the Act. Most of HEW's other responsibilities are largely those of consultant or advisor to the Labor Department.

Although NIOSH became an official organization on April 28, many questions remain about its organization and relationship to the HEW Department. The core of the Institute will consist of the present Bureau of Occupational Safety and Health (BOSH)--formerly a subunit of HEW's Environmental Health Service. The formation of the Environmental Protection Agency emasculated the Environmental Health Service and left BOSH reporting directly to Assistant HEW Secretary for Health Roger O. Egeberg. In this reorganization, BOSH also acquired parts of the old Bureau of Radiological Health, including the Electronics Products Division. More recently, BOSH has acquired the Occupational Studies Unit of the National Institute for Environmental Health Sciences.

Structure: NIOSH will be located within the Health Services and Mental Health Administration at a one-level higher position in the administrative chart than had been originally proposed by HEW staff.

Although NIOSH was not formally established, BOSH--under Dr. Key--moved ahead in establishing regional offices for the forthcoming Institute. On April 21, Key announced that Stanley J. Reno, BOSH deputy director, had been designated Acting Assistant Director for Regional Operations for NIOSH. Key assigned Reno responsibility for "recruitment and rapid staffing" of the regional offices.

According to an in-house task force report prepared by BOSH staff, regional offices will play a major role in the day-to-day activities of the new Institute. It will be the regional offices, in the main, that will be charged with responding to requests for toxicity determinations and monitoring hazards and diseases. They will also have key responsibilities

in providing industry with technical assistance and in helping states develop their organizations and programs.

At present, BOSH has four regional representatives:

Region I--Dr. G. Warren McCarl, John F. Kennedy Federal Building, Boston, Mass. Dr. McCarl has primary responsibility for Conn., Me., Mass., N.H., R.I. and Vt. He also lends assistance (on a part-time basis) to Region II jurisdictions N.J., N.Y., P.R. and V.I.

Region IV--Kenneth J. Kronoveter, Peachtree-Seventh building, Atlanta, Ga. Kronoveter has responsibility for Ala., Fla., Ga., Ky., Miss., N.C., S.C. and Tenn.

Region V--Marshall E. LaNier, New Post Office Building, Chicago, Ill. LaNier has responsibility for Ill, Ind., Mich., Minn., Ohio and Wisc.

Region IX--Douglas L. Johnson, Federal Office Building, San Francisco, Calif. Johnson has primary responsibility for Ariz., Calif., Hawaii, and Nev. He also lends assistance (on a part-time basis) to Region X jurisdictions Alaska, Ida., Ore. and Wash.

In analysis, four regions, comprising 24 states, now have a full time BOSH representative; two regions, comprising six states, Puerto Rico and the Virgin Islands, have a representative available to them on a part-time basis; and 20 states and the District of Columbia have no representative, but are served by BOSH consultants stationed at the Cincinnati and Salt Lake City laboratories.

With one exception, however, regional BOSH representatives have been one-man operations; the exception is the Atlanta region, which has also had a professional staff member to assist the regional rep.

The task force proposed upgrading the regional offices envisioned in the NOSH organization to cope with expanded duties. The upgrading includes raising the prestige of the regional staff within the organization. No longer will top regional administrators be called "regional representative but will be NIOSH assistant directors. Also, rather than one-man operations, plans are now to have eight to 10 professionals in each region, including specialists in industrial medicine, toxicology, industrial hygiene and safety.

Occupational Safety and Health Review Commission

The Act provides for a three-member Presidentially-appointed Occupational Safety and Health Review Commission, an independent quasi-judicial agency. The commission will have hearing examiners to review the enforcement provisions of the Act. It will have authority to develop its own operating rules.

The President has nominated and the Senate has confirmed three commissioners: Robert D. Moran (chairman with a six-year term), Alan F. Burch (two year term) and James Van Namee (four year term).

Significance

The nominees are well attuned to Labor's administration of the safety laws under existing federal contract law: Moran as administrator of the Workplace Standards Administration, Van Namee as president of the American Society of Safety Engineers and Burch as a member of both the National Safety Council and Labor's National Safety Advisory Committee. None of the three are medically knowledgeable.

The Review Commission will be watched carefully as it builds up a body of precedent for enforcement, but it is not likely to stray significantly from guidelines developed under the old procedures. Its initial cases should not be brought for some time.

Other Agencies

The White House gives no sign of intervening in the early process of Labor's reorganization, nor in establishing priorities for standards. A patronage issue may be involved in the eventual choice of NIOSH's Director, but there is general confidence in both Labor and HEW in respect to the Act's provisions; hence, no highly active White House role at present.

Environmental Protection Agency is in the process of its own organization and has not perceived an significant responsibility in the

OSH field. Its growing attention to toxic and hazardous substances indicat an eventual role is likely, if only to support Labor and HEW responsibiliti

Standards

Background: The Secretary of Labor has two years to adopt as occupational safety and health standards any of the pre-existing "national consensus"or"established federal" standards which have gone through effective review procedures. If the Secretary promulgates new standards or modifies or revokes any of the existing standards, he must first follow the detailed notice, comment and hearing schedule required by the Act.

If the proposed standard has not been subject to "consensus" procedu an advisory committee will undertake the procedural scrutiny formerly provided by the private organizations. Advisory committees' procedures are expedited: 90-270 days for a committee recommendation as contrasted with months or years for NFPA or ANSI procedures. This streamlined process allows the Secretary to consider proprietary or professional standards produced by industry groups or organizations which do not have diverse memberships and therefore cannot use the "consensus" principle of adoption.

Most significant to airborne asbestos regulation are the emergency standards that can be promulgated in cases of imminent danger, temporarily bypassing the regular procedures for up to six months. These extraordinary powers were derived from the growing concern for health problems created by airborne contaminants and exposure to toxic agents. The emergency provisions were included to allow Labor to respond quickly to safety crises as well as new hazards research from HEW. The provisions for emergency standards can be exercised in conjunction with enforcement procedures to counteract imminent danger in extreme cases.

In setting standards and priorities, the Act requires the Labor Department to give "due regard" to the recommendations of the HEW Secretary. NIOSH is charged with developing the criteria on which the HEW recommendations will be made. The recommendations, however, will be subject to review and approval by the office of the Assistant HEW Secretary for Health.

The validity of a standard can be reviewed by the U.S. Circuit Court of Appeals upon petition by any person claiming adverse impact. The first appeal process offers the employer the advantages of review at the Circuit Court level before enforcement steps begin. These are counterbalanced by the requirement that the employer must argue separately, the issues of (a) the validity of the standard on the basis of substantial evidence and (b) the likelihood of adverse impact justifying a stay of effectiveness of the promulgated standard.

Employers' second pre-enforcement appeal alternative is to seek a temporary variance from immediate compliance. The burden of this approach weighs heavily on employers because noncompliance may be temporarily forgiven only under a few limited conditions:

--unavailability of personnel, equipment or facilities

--availability of protection for his employees from the hazard at issue

--reasonable schedule for compliance, or

--special exemption for participation in an approved experimental project

Interim and renewed variance orders of limited duration are available to the employers, but no appeal on grounds of "economic hardship." Finally, employees have a right to a hearing to contest an employer's application for variance.

AL-2788

Status: DOL's interim standards package is ready for publication in the Federal Register beginning May 15, 1971. The nineteen subsections of a new Part 1910 (29 CFR) will fill about 400 pages of the Register by May 22.

Horizontal standards are adopted for all industries and include the mandatory provisions of the three sources in 15 general industry categories:

walking and working surfaces
means of egress
powered platforms, manlifts, and vehicle-mounted work platforms
occupational health and environmental control
hazardous materials
personal protective equipment
general environmental controls
medical and first aid
fire protection
compressed gas and air equipment
materials handling and storage
hand and portable powered tools
machinery and machine guarding
welding and cutting
electrical code

DOL has used the Section 6 (a) interim package process to federalize the existing consensus and established federal regulations, but chose not to expand application of standards beyond the original target determined in the earlier promulgation review processes of ANSI, NFPA, or the contract laws. The 6 (b) permanent standards process will be used to develop DOL's two-pronged approach:

--update and fill in the gaps of the existing standards

--develop standards which have broad applicability rather than aim at specific industry targets.

Proprietary standards have been adopted for horizontal application where consensus or established federal promulagation procedures have adopte them. For example, ACGIH's Threshold Limit Values for Airborne Contaminant and Physical Agents and the Compressed Gas Association standards are incorporated with some modifications.

Industry and workers will have a 90-day familiarization period before standards go into effect.

The continuing evaluation of standards will be the immediate responsibility of the Office of Safety and Health Standards within OSHA (Patrick Cestrone, director). Standards policy will be reviewed by the Solicitor's Office and the Advisory Committee on OSH. This co.. 'ttee was formerly under the Secretary's direction, but its authority was extended under OSH Assistant Secretary Guenther's leadership by orders issued May 12, 1971.

Priorities and Revisions: The 450 standards adopted by ANSI and NFPA will be an early target of revision; 32 per cent are over ten years old, 28 per cent are between five and ten years old. There are 50 areas where national standards do not exist or are inadequate (including manufacturing, primary metal, electrical equipment and supply, transportation equipment, construction and service industries).

The most likely application of emergency inspection and emergency standards would be in areas of chemical exposure (e.g., pesticides in farm industries) and mineral dust hazards (e.g., asbestos and coal mining industries). HEW is reportedly anxious to move toward early standards for beryllium, carbon monoxide, heat stress, ultra-violet exposure and noise.

In HEW, the mechanism for recommending standards criteria and priorities was included in the task force report forwarded by the Surgeon General to HEW Secretary Richardson. The task force unit

which formulated these recommendations was under chairmanship of Edward Fairchild, director of BOSH's Division of Criteria and Standards Development. The procedures mechanism is an integral part of the NIOSH organization; it is not likely that it will be announced before the structure of NIOSH is announced.

Advisory committees may be appointed by the Labor Secretary to assist him in his standard-setting functions. Each such committee shall consist of not more than 15 members and shall include one or more members designated by the HEW Secretary.

HEW's designees to these committees will originate in NIOSH with the office of the Assistant HEW Secretary for Health retaining final approval. Task forces struggling to convert BOSH to NIOSH have yet to deal with committee appointments formally. Names are being readied, however, for approval and submission once NIOSH becomes official and its director is named.

Standards committee members will be drawn from the NIOSH staff of safety engineers and occupational health professionals; their interests are expected to be limited to scientific input with Labor representatives making necessary policy decisions.

Appeals, Variances and Exemptions: This will be a testing area for Labor's preliminary efforts to gain management and labor cooperation. Some informal and formal conferences have been held, with Labor encouraging business and union officials to help the department implelent the Act. Labor has remained relatively quiet on discussions of standards, however, under the assumption that employers could be expected to comply with reasonable preexisting standards. The Act tried to avoid the use of variance procedures to delay employer compliance, but the test will come when Labor starts to promulgate, modify or revise standards anew.

Toxic Substances: NIOSH is charged with publishing, before June 29, 1971, a generic listing of all known toxic substances. The list must be updated annually and must show the concentrations at which toxicity occurs.

The toxicity list to meet the June 29 deadline is currently under preparation by a task force under Bobbie Kraft, deputy director of the BOSH division of Occupational Injury and Disease Control.

The basis for the toxic substances list is the current "Threshold Limit Values of Airborne Contaminants" list adopted by the American Conference of Governmental Industrial Hygienists for 1970. The TLV list contains about 400 toxic agents; BOSH predicts that the list now under compilation will contain about 10,000 agents.

The list will include a standard for asbestos that is more stringent than previous standards. According to Dr. Herbert Stokinger, chairman of the advisory committee that determines the asbestos standard and chief of BOSH's laboratory of Toxicology and Pathology, it will be set at 5 fibers/ml>5 in length, down from 12 fibers. One member of the advisory committee, Dr. Irving Selikoff, has been pushing for a standard of 2 fibers/ml 5 in length, but as yet has not convinced the other members of the committee that such a standard is needed. Once the standard is set it is expected to remain at that level indefinitely. The new standards will be listed at 29 CFR 1910 in the Federal Register.

Record Keeping: Employers will have to keep--and make available--records about their activities under the Act. The Labor Secretary, in cooperation with the HEW Secretary, has a clear hand in prescribing the kinds of information to be kept. He is required, however, to prescribe regulations requiring employers to record and periodically report work-related deaths, injuries and illnesses. Exempt from reporting are minor injuries that do not involve medical treatment, loss of consciousness, restriction of work or motion, or transfer to another job.

NIOSH is charged will collecting information about potentially toxic substances or harmful physical agents. The Institute may prescribe regulations requiring employers to measure, record and report exposure of employees to endangering agents. Employers who are required to keep such data, however, may claim full financial assistance to defray any additional costs.

The statistic-gathering proposals for NIOSH were developed some time ago by Vernon E. Rose, Jeffrey S. Lee and Howard L. Kusnetz, all of BOSH's Cincinnati laboratory. They are included in "National Surveillance Network for Occupational Health"--a document prepared by, and available from, BOSH (1014 Broadway, Cincinnati, Ohio 45202).

Research

The overall research called for by the Act will be conducted through NIOSH. This section describes the categories of research and their status.

Health and Safety: NIOSH has primary responsibility to conduct research, experiments and demonstrations relating to occupational safety and health. The Labor Department has consultation authority. The projects may be conducted directly by NIOSH or by grants and contracts with individuals or institutions.

The law leaves the area for investigation open, specifying only that the research relate to occupational safety and health, including psychological factors and innovative approaches to solving occupational safety and health problems.

This provision is an upgrading of research currently carried out by BOSH. Grants and contracts to outside investigators will follow the current proposal-screening mechanism and award system under BOSH's Safety and Occupational Health Study Section. (See Appendix B for study section members).

Criteria to Describe Harmful Agents: On the basis of research, demonstrations, experiments and available information, NIOSH has the responsibility to develop the basic information, or criteria, on which new standards will be based. Plans are to publish the criteria in documents that will be available to interested persons at the time new standards are proposed.

In the works by BOSH's Division of Criteria and Standards Development at the present time--partly because of the amount of literature available--are criteria documents covering asbestos, carbon monoxide and coal-tar pitch volatiles. Another area of concern is ammonia.

Low-level Exposure: Before Dec. 29, 1971--and annually thereafter--NIOSH is required to conduct and publish industry-wide studies of the effects of chronic and low-level exposures to industrial materials, processes and stresses.

Several studies are now underway on low-level exposures. Conducted by BOSH, the studies focus on exposure to uranium, coal dust, carbon monoxide and benzene.

The Occupational Studies Unit--recently added from the National Institute of Environmental Health Studies to the agency mix that will become NIOSH--will provide considerable support to this undertaking. The unit has previously been concerned with detecting morbidity and morality trends for selected occupational groups, and has emphasized trends in cancer-caused deaths.

Publication of Research Criteria: The law requires that NIOSH consult with the Labor Secretary in developing its research, demonstration and experiment plans.

According to BOSH staff members, it is premature to consider research plans until priorities for standards have been defined. It

is clear, however, that the research guidelines will contain greater controls over the scientists than the guidelines currently in effect for NIH institutes. NIH gives a great deal of leeway to scientific instinct and serendipity; NIOSH sees its primary research needs as goal-directed applied research.

This may mean that more obvious problems--airborne asbestos exposure, for example--will get first attention simply because a body of knowledge already exists on which research goals can be established.

Federal-State Relations

Background: The Secretary of Labor can make agreements with states to let them continue enforcing standards until final state plans are approved, or until the end of 1972, whichever is earlier. If no federal standard exists for a particular occupational safety or health area, jurisdiction remains available to the state authorities.

If federal standards are adopted and the state wants enforcement responsibilities, the state must gain the Secretary's approval of a state enforcement plan. Even if a state plan is adopted, the Secretary has three years during which he can exercise his own enforcement responsibil

State Plans: Between 30-35 states had responded (as of April 9, 1971) requesting authority to continue state enforcement until the end of 1972 or until a state plan could be developed. The Secretary will issue guidelines for state plans after the agreements are in operation and after some state-federal experience is developed. Sixty days after the guidelines are presented, the states must express their intent to file a plan within the next nine months. If a state fails to follow this schedule, the agreement can be abandoned and the federal authority can preempt responsibilities in that state.

Labor's coordination efforts with state authorities and the financial assistance available make it likely that states will cooperate.

Labor wants to encourage state programs, but will continue working closely with local officials to assure that state priorities are the same as Labor's.

Labor intends to issue guidelines for states seeking planning and program grants as soon as it completes its evaluation of pre-existing state safety and health laws and operations. The department is about a month behind in its scheduled plan to have all initial planning grants issued during May and June. This will create further delays in the initial schedule estimated for approval and funding of state programs:

Jan.-Feb. 1972 - submission of state program plans
May 1972 - approvals completed
July 1972 - funding completed

Enforcement

Background: The Secretary of Labor may enter and inspect any workplace at any "reasonable times, and within reasonable limits and in a reasonable manner," have available to him any employer's records which he requires; and may subpoena witnesses. Representatives of the employer and the employees have a chance to accompany the DOL inspector during his examination of the workplace.

NIOSH has the authority to inspect work places and question employers and employees in order to carry out its responsibilities for record keeping, statistics gathering, medical examination, research, and so on.

NIOSH has deferred to the Labor Department for establishing right-of-entry procedures dealing with the enforcement side of HEW's role. NIOSH will, however, develop its own procedures for right of entry for research projects authorized under Sec. 20(a)(1) at a later date.

Information developed in inspections/investigations can be used as the basis for a citation specifying a time by which an employer must

correct a violation of the Act or its standards. If the employer fails to correct the violation or if employees object to the time required, the Secretary notifies the employer of penalties to be assessed and the administrative procedures available to contest the matter. The Occupational Safety and Health Review Commission makes a determination on the matter if there is a contest, and the Review Commission's order is reviewable by the U.S. Court of Appeals. If no contest, the Secretary's order becomes final and is not reviewable.

Emergency enforcement procedures require the Secretary of Labor to obtain a district court temporary restraining order to counteract imminent danger. Total cessation of operations at the hazard site cannot be ordered, and expedited administrative procedures must be started, by the Secretary within five days of the court order.

Judicial review of Review Commission orders by the U.S. Courts of Appeals will consider two types of petitions:

1) By an employer if he contests the Secretary's citation for a violation or notice of proposed assessment of penalty.

2) By the Secretary for review or enforcement of any Review Commission order.

If an employee believes he has been discharged or discriminated against for exercising any rights afforded him by the Act, he may file a complaint with the Secretary (whose decision is reviewable by the district court directly).

Target Industries: Labor has indicated the ten target industries ("worst first" in terms of injury-frequency rates) as the most likely to be entered and inspected for purposes of enforcement:

longshoring	food and kindred products
lumber and wood products	stone, clay, and glass products
trucking and warehousing	fabricated metal products
contract construction	rubber and plastic products
foundries	paper and allied products

Labor's criteria for selecting inspection sites combine the statistical ranking (frequency and severity rankings) with judgement factors, such as,

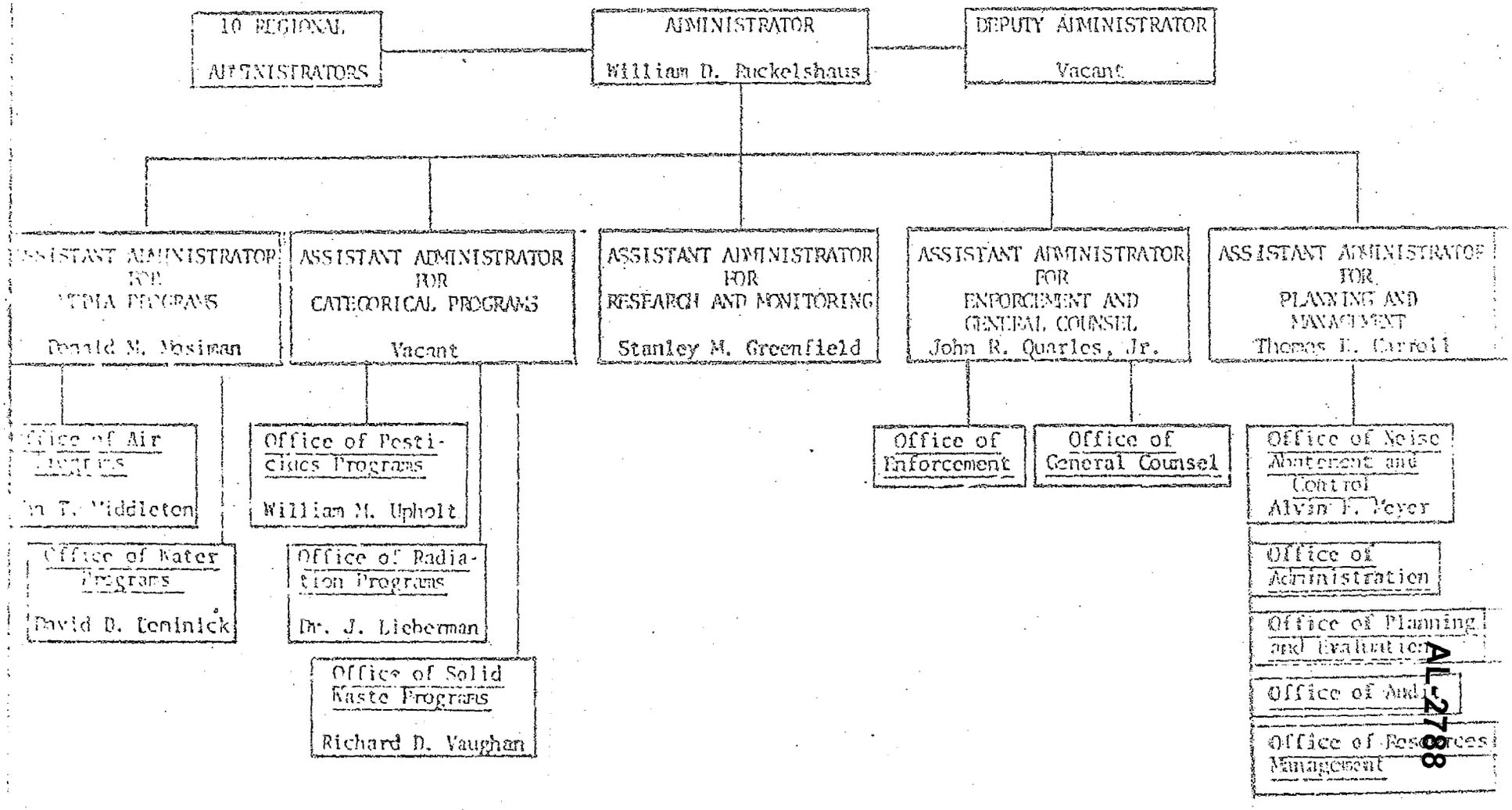
-- the degree of catastrophic potential
-- the relative need of small operations with limited safety staffs and
-- the extent of employee or organized labor complaints

Appeals: The provisions for review are not unusual, but are designed to assert employees' protection against discrimination for providing information or for filing complaints against an employer who is violating the Act. The appeals processes are relatively well-established on the management level (corporate cousel) and in Labor (Solicitor's Office). Contrary to the opinion that this section affords employees new rights, it is doubtful that the complaint procedures will protect workers from being discharged for exercising employee responsibilities. In recognition of this, union representatives are considering alternatives to individual action (e.g., adding safety and health inspectors to union and employee organizations and collective complaint procedures).

APPENDIX A

ENVIRONMENTAL PROTECTION AGENCY

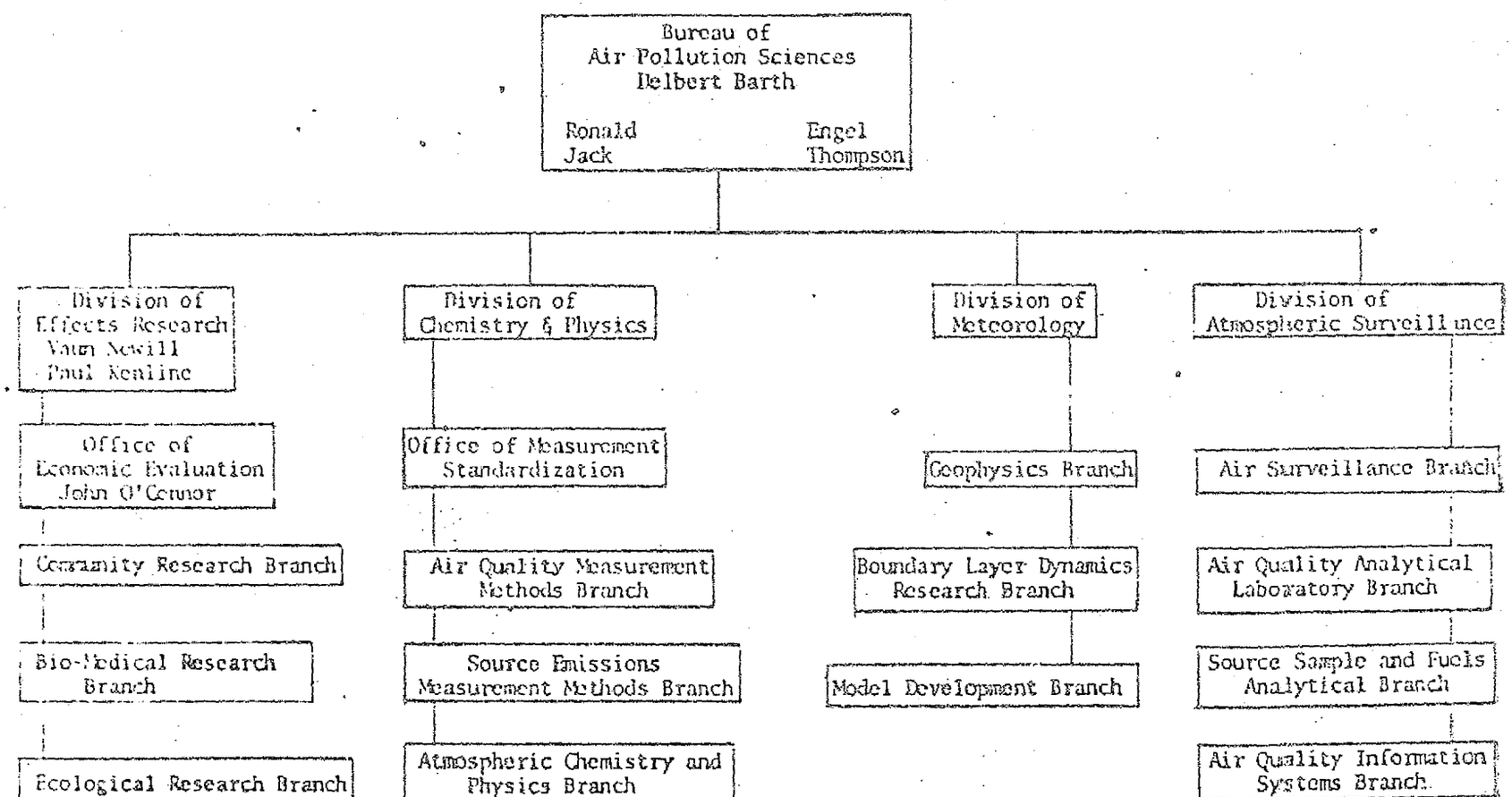
(May 4, 1971)



CRMC-WKHER-000077

AL-2788

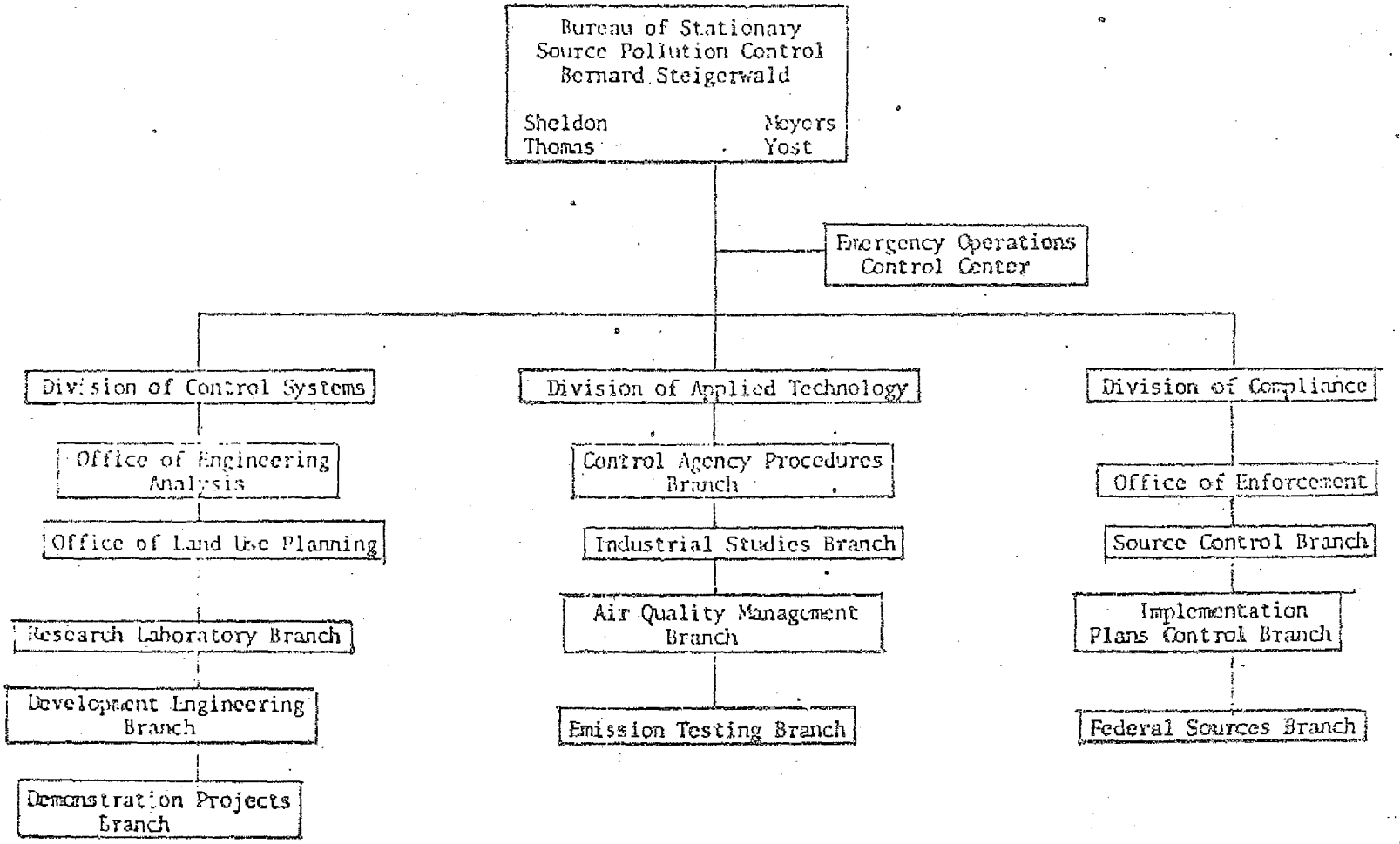
BUREAU OF AIR POLLUTION SCIENCES



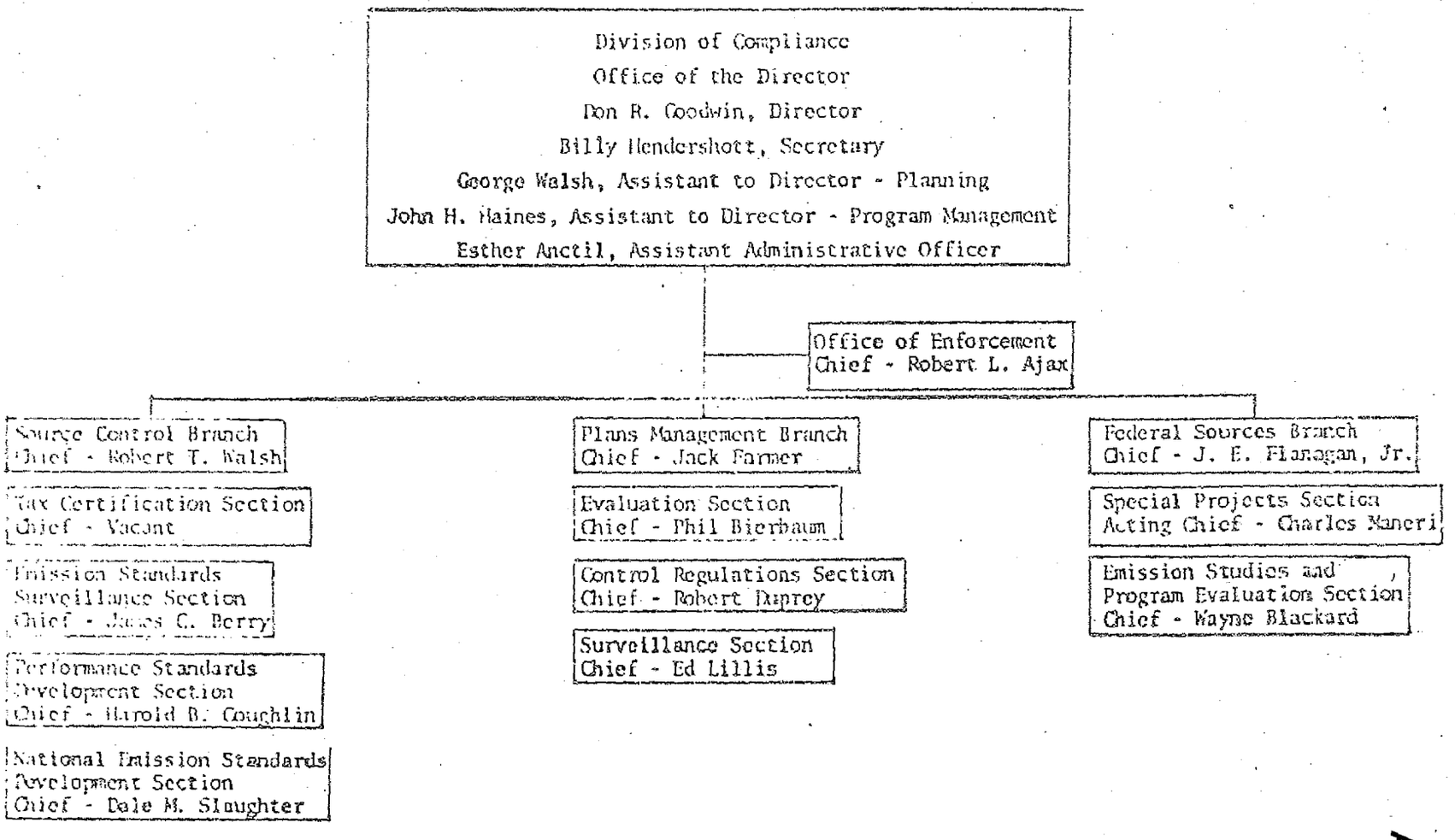
Revised 3/22/71

AL-2788

CRMC-WKHER-000078


Bureau of Stationary Source Pollution Control
Bernard Steigerwald
Sheldon
Thomas
Meyers
Yost
Emergency Operations Control Center
Division of Control Systems
Division of Applied Technology
Division of Compliance
Office of Engineering Analysis
Office of Land Use Planning
Research Laboratory Branch
Development Engineering Branch
Demonstration Projects Branch
Control Agency Procedures Branch
Industrial Studies Branch
Air Quality Management Branch
Emission Testing Branch
Office of Enforcement
Source Control Branch
Implementation Plans Control Branch
Federal Sources Branch

AL-2788



Division of Compliance
Office of the Director
Don R. Goodwin, Director
Billy Hendershott, Secretary
George Walsh, Assistant to Director - Planning
John H. Haines, Assistant to Director - Program Management
Esther Anctil, Assistant Administrative Officer

Office of Enforcement
Chief - Robert L. Ajax

Source Control Branch
Chief - Robert T. Walsh

Tax Certification Section
Chief - Vacant

Emission Standards
Surveillance Section
Chief - James C. Berry

Performance Standards
Development Section
Chief - Harold B. Coughlin

National Emission Standards
Development Section
Chief - Dale M. Slaughter

Plans Management Branch
Chief - Jack Farmer

Evaluation Section
Chief - Phil Bierbaum

Control Regulations Section
Chief - Robert Duprey

Surveillance Section
Chief - Ed Lillis

Federal Sources Branch
Chief - J. E. Flanagan, Jr.

Special Projects Section
Acting Chief - Charles Maneri

Emission Studies and
Program Evaluation Section
Chief - Wayne Blackard

AL-2788

CBMC-WICHER-000080