

**DEFUSING THE
ASBESTOS
LITIGATION CRISIS:**

**The Responsibility of the U.S.
Government**

by

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Foreword by

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FOREWORD

Nothing in my experience as a lawyer has come close to the avalanche of lawsuits now being brought, pending or yet to be brought, inundating our state and federal courts with claims by workers who say they are or have been injured by excessive exposure to asbestos in the workplaces of the past.

Few observers remember the history of asbestos use by Navy and private shipyards in the period immediately before and after World War II, when its use as insulation material was mandated by Government set-asides, priorities and compulsory contract specifications.

The Monograph which follows traces this chronicle and proves, certainly by a preponderance of the evidence and perhaps even beyond a reasonable doubt, that the Government has a hard time justifying its use of sovereign immunity as a means of avoiding some responsibility for the health hazards suffered by thousands of shipyard workers who were exposed to uncontrolled, excessive amounts of asbestos during our massive, successful World War II shipbuilding efforts.

The dissenting five judges of the United States Court of Appeals for the Fifth Circuit stated the Government's responsibility succinctly in a recent case: "The Court is frustrated by lack of Congressional action. A number of legislative solutions [for Government participation in a fund to be administered outside of court action] have been proposed for the problems we must confront today and tomorrow throughout America because of yesterday's production and use of asbestos. None has been enacted. Clearly the powers of Congress to tax and regulate give the forum the interstate reach and flexibility needed to allocate the relatively scarce resources that must be available to present and future claimants to achieve the greatest good for society."¹ Here the judges are underscoring the major thesis of the Monograph which follows.

The authors have done an outstanding job in making a case for the Government's responsibility in the crisis of the courts caused by the filing of over 35,000 civil cases dealing with this subject. Mr. Artabane, Ms. Baumer and the Washington Legal Foundation are to be congratulated for producing a well-researched and thought-provoking Monograph on a subject of overwhelming importance to the World War II shipyard worker claimants, the Court system, Congress and to our society as a whole.

Washington, D.C.
July, 1986

Henry J. Hyde
United States House of Representatives

¹Jackson v. Johns-Manville Sales Corp., 781 F. 2d 394, 415 (5th Cir. 1986) (en banc) (Clark, Gee, Garza, Politz & Jolly, J.J., dissenting).

INTRODUCTION

“Asbestos”—from the Greek adjective for inextinguishable—is a generic term used to describe a group of fibrous minerals. Chrysotile (white asbestos) is mined primarily in Canada and accounts for ninety-five percent of the United States’ consumption; South Africa is the sole producer of crocidolite (blue) and amosite (brown) asbestos.¹ Apart from its unique fibrous structure, asbestos is highly resistant to fire, heat, moisture, corrosion, chemical action and electricity, and has high tensile strength, great durability and flexibility.² Indeed, the ancients dubbed asbestos “the magic mineral.”³

These unique properties made asbestos important to industry and to the United States Government for a number of applications.⁴ The Navy in particular required asbestos-containing insulation products for use in the construction and repair of naval vessels.

1. The Government’s Massive Use of Asbestos-Containing Products

By the late 1800’s, the United States Navy had promulgated specifications requiring the use of asbestos in insulating cements and pipecoverings for U.S. naval vessels.⁵ Until the 1940’s, chrysotile was used almost exclusively in the manufacture of asbestos-containing insulation products.⁶ By the mid-1930’s, the Navy had discovered amosite to be particularly suitable for high-temperature insulation on ships.⁷

It was not until the Government’s vast World War II shipbuilding effort, which employed 4,500,000 civilian workers, that U.S. asbestos consumption soared.⁸ Many asbestos-containing products were developed specifically for use on United States naval vessels. In each instance, the Government controlled and actually participated in the design, development, testing and engineering of the product by means of regulations, specifications, mandatory testing and approval, technical consultations with each manufacturer, and otherwise.

From the outset of World War II, the Government viewed asbestos as a critically important strategic material, and officially designated it as such.⁹ Indeed, the Government undertook to stockpile vast amounts of asbestos and to assume absolute control over the importation, distribution and use of asbestos in this country. Most of the asbestos imported during World War II and the post-War period was used in the construction and repair of naval and merchant vessels. By 1943, the United States’ annual consumption of asbestos totalled 445,902 short tons.¹⁰

The Government’s unprecedented demand for asbestos-containing products during World War II had an immediate and profound effect upon the manufacturers of asbestos-containing insulation products. By 1940, the Government’s requests for certain asbestos-containing insulation had exceeded the industry’s productive capacity. As a result, the United States Government in some instances ordered the establishment of new production facilities to fulfill existing and anticipated Government contracts. Throughout World War II, the manufacturers responded to and satisfied the Government’s requirements,

and, in doing so, contributed enormously to the success of the nation's war effort.

2. The Government's Failure to Protect Shipyard Workers Despite Its Early Knowledge of the Health Risks of Asbestos

The Government was directly aware at least as early as 1939 that unprotected excessive exposure to finished asbestos-containing insulation products as they were used in shipyards posed health risks to shipyard workers.¹¹ Despite that knowledge—which increased dramatically as the result of *classified* internal Government reports of industrial health and safety surveys conducted by the United States Navy and the Maritime Commission at Government and contract shipyards in the early 1940's (which were not disseminated outside the Government until the 1980's)—the Navy failed even to begin to protect Navy and civilian personnel and others from the uncontrolled, excessive exposures to asbestos until 1978. As late as 1983, the Navy continued to violate existing Occupational Safety and Health Administration ("OSHA") regulations and its own requirements for handling asbestos safely.

3. The Government's Unwillingness To Accept Responsibility

More than 35,000 asbestos-related personal injury lawsuits are currently pending in the state and federal courts of this nation. Claimants in over fifty percent of these actions¹² have alleged that they were exposed to excessive amounts of asbestos in the course of their employment at Government-owned shipyards and/or at private shipyards engaged in the manufacture and repair of United States naval and merchant vessels pursuant to Government contracts. These asbestos-related diseases are the legacy of past uncontrolled, excessive exposures in the shipyard context.¹³

Yet the Government refuses to accept any responsibility for these past failures to provide a safe work environment or even to warn its workers about a potential threat to their health from these excessive exposures. The Government is seemingly indifferent as an untold number of former World War II shipyard workers are forced to compete for even a small portion of the limited funds being made available through traditional workers' compensation schemes. The Government remains aloof as private manufacturers, who during World War II responded to the Government's insistence on, and need for, asbestos-containing insulation products, are pushed to the brink of financial disaster defending themselves against suits and paying out settlements relating to the past uncontrolled and excessive shipyard exposures. Instead, the Government has chosen merely to observe as the tens of thousands of lawsuits overwhelm the state and federal court systems.

4. The Need For Legislative Relief

Plaintiffs in the asbestos disease suits resulting from past shipyard exposures are caught in a tangle of workers' compensation and medical regulations that at best afford them arbitrary, inefficient and tardy relief. Yet the Govern-

ment rests comfortably in the knowledge that federal workers' compensation statutes simply preclude workers' suits against the Government. As a result, these workers have brought suit against the only "available" defendants—the manufacturers. The manufacturers in turn have brought claims against the United States for indemnification or contribution for the sums the manufacturers have paid to asbestos claimants.

The United States Court of Appeals for the Fifth Circuit, noting the inability of the nation's court systems to deal effectively or fairly with the matter of compensating individuals injured as a result of asbestos exposure, recently concluded that "a desperate need exists for federal legislation in the field of asbestos litigation."¹⁴ The United States Government bears a very large share of the responsibility for the asbestos tragedy which clearly is the legacy of past excessive shipyard exposures. For that reason, the Government's role is essential to any equitable, long-term resolution of the present asbestos crisis.

Congress has attempted to correct this injustice by means of an asbestos disease compensation scheme involving the manufacturers, their insurers and the Government. The legislation has failed each time, primarily because of the Government's disturbing refusal to accept any responsibility for asbestos-related disease claims arising from World War II shipyard exposures. Any workable, practical and equitable compensation system must include active participation by all—including the Government—who represent the interlocking pieces in this complex puzzle. The Government cannot be permitted to seek immunity where, as here, it controlled the specification, acquisition, and use of asbestos-containing products.

As set forth more fully herein, the present manifestation of asbestos-related disease is clearly and uncontrovertibly a latent cost of winning World War II. Consequently, the Government should contribute to a fund to compensate claimants for asbestos-related injuries rather than spending equal or greater sums in litigation.

I. OVERVIEW OF THE WORLD WAR II SHIPBUILDING EFFORT

A. The Need to Build Ships as World War II Approached

With the outbreak of war in 1939, the United States undertook the most massive shipbuilding endeavor in world history.¹⁵ By 1943, Government shipyards and private shipyards under Government contract employed a workforce of 1,750,000 civilians.¹⁶ An estimated 4.5 million civilians worked in Government and private shipyards during World War II.¹⁷

During this unprecedented effort, in which the United States went from a one-ocean navy to a seven-ocean navy, the United States shipbuilding industry expanded from 32 to 131 Government and private shipyards capable of building large naval and merchant vessels.¹⁸ These shipyards, operating on a 24-hour-a-day, seven-day-a-week schedule, built 7,000 ships and performed 67,000 repairs and conversions on naval and merchant vessels.¹⁹ In 1943 alone, the United States Maritime Commission shipyards built 18 million deadweight tons of large cargo carriers and tankers, more than the total U.S. merchant fleet in 1939 (which then consisted of 12 million deadweight tons).²⁰ The U.S. shipbuilding industry provided the “bridge of ships” which was essential to transport, supply and protect the American forces fighting the Axis powers.²¹

B. Asbestos-Containing Insulation Products Met the Needs of Developing Ship Technology.

Government specifications for the construction, repair and conversion of naval and merchant vessels required the use of massive amounts of asbestos. The United States Navy and the U.S. Maritime Commission were the greatest consumers of asbestos during World War II.²² The Government specifically required for shipbuilding and ship repair such asbestos-containing products as piping and machinery insulation, boiler and furnace linings, marine insulating board for bulkheads and electrical cable insulation.²³ The Government’s most significant requirement for asbestos was as a component of high-temperature insulation products such as amosite asbestos felt, pre-formed pipecovering, block, cements and asbestos lagging cloth for the ships’ generating plant and propulsion systems.²⁴

Asbestos-containing insulation was virtually the *only material that the Government specified for those uses*.²⁵ Peak World War II consumption of amosite asbestos felt insulation amounted to 15 million board feet per year.²⁶ In post-war years, the Navy’s consumption remained at approximately 1 million board feet per year.²⁷

C. The Government Expressly Required Asbestos as a Component of Insulation Products Used on Ships.

The Government agencies and the private and Government shipyards involved in the shipbuilding effort were required, pursuant to Government contracts, to procure only those asbestos-containing insulation products that the Government had approved and certified to be in compliance with mandatory Government contract specifications.²⁸ Those Government specifications, the predecessors of which dated back to the late 1800's,²⁹ required (expressly in most instances) asbestos as a principal ingredient, and set forth in detail the properties required of the product. The Government had the sole responsibility for establishing, approving and issuing the contract specifications.³⁰

Government specifications prescribed rigid qualification and brand approval tests, and sampling, inspection and testing requirements to determine at the time of procurement whether products procured pursuant to Government contract complied with specifications.³¹ The Government also prescribed strict requirements for the application and installation of asbestos-containing products on naval and merchant vessels.³² Frank V. Connolly, former Director of the Special Rating Division of the War Production Board during World War II, described the Government's procurement of asbestos-containing products in recent testimony before the Subcommittee on Labor Standards of the House of Representatives' Committee on Education and Labor:

Mr. Chairman, I was there and can tell this Committee without hesitation that the companies manufacturing asbestos-containing products during World War II according to Government specifications for delivery to the Armed Forces were *required* by statute to do so, and were required to give the Government's requirements the highest priority. The War Production Board assured that this job would get done.

* * *

There was no question then—and I have none now in my own mind—of who had the final word. It was always the Federal Government. Meeting the Government's requirements and specifications and fulfilling the Government's contract requirements, always was the *first priority*.³³

The Government exercised virtually complete control over the production and use of asbestos-containing insulation products in Government and contract shipyards.

D. Government Control Over The Acquisition, Distribution and Stockpiling of Asbestos

On January 16, 1942, President Franklin D. Roosevelt issued Executive

Order No. 9024, establishing the War Production Board ("WPB") within the Office of Emergency Management of the Executive Office of the President.³⁴ The purpose of the WPB was to assure the most effective means of war procurement and production.³⁵

The major activities of the War Production Board revolved around its exercise of the power to assign priorities to deliveries of materials, to require acceptance and performance of contracts and orders deemed necessary for the defense of the United States, and to reallocate materials and facilities in short supply. Those powers were vested in President Roosevelt by Title III of the Second War Powers Act, and were, in turn, delegated by the President to the board.

The board exercised overall control of the War Production and Procurement Program and directed the flow of materials and components throughout the industrial system. By the end of 1942, the value of that war production was larger than the total national income of the Depression years.³⁶

Throughout the war years, the WPB (i) determined supplies, requirements, and allocations of asbestos for both military and civilian use; (ii) stockpiled, purchased, and contracted for asbestos; (iii) regulated the export and import of raw asbestos; (iv) issued conservation orders limiting the use of raw asbestos and asbestos-containing products; (v) developed specifications for asbestos-containing products; (vi) financed and authorized private war facilities which manufactured asbestos products; and (vii) monitored and controlled production levels at private facilities. The Government—through the WPB—was involved in virtually every facet of wartime asbestos production and procurement.

1. Government Control Over Asbestos as a "Strategic and Critical Material"

On June 7, 1939, Congress enacted Public Law No. 117 to

provide for the common defense by acquiring stocks of strategic and critical materials essential to the needs of industry for the manufacture of supplies for the armed forces and the civilian population in time of a national emergency, and to encourage, as far as possible, the further development of strategic and critical materials within the United States for common defense.³⁷

Asbestos was one of twenty-nine substances listed in regulations under the Act as strategic and critical materials essential to the needs of industry for the manufacture of supplies for the armed forces and the civilian population in time of national emergency.³⁸ On January 30, 1940, the Army and Navy

Munitions Board included asbestos on the first published list of critical materials.

To control the flow of materials and finished products in the war economy, the Office of Production Management ("OPM")³⁹ (the predecessor of the WPB⁴⁰) promulgated Priorities Regulation No. 1, requiring the issuance of preference rating (priority) certificates to producers of commodities necessary for the war effort.⁴¹ Priorities Regulation No. 1 required that defense orders or any other rated order be accepted and allocated a place in production and delivery schedules in preference to unrated orders.⁴² Suppliers also were required to supply raw materials or components to those producers holding the highest priorities.⁴³ Priority or "preference" ratings from AAA to B-8 indicated the relative importance of the use of materials.⁴⁴ Shipbuilding and similar industries were assigned the highest priorities.⁴⁵

All rated orders, military and civilian, were compulsory and had to be accepted, with delivery dates specified.⁴⁶ As specific emergencies arose, preferences could be resolved through the "Special Rating Division" of the WPB.⁴⁷ The priorities system became the basis of the entire American economy and was focused on one objective—the war effort.⁴⁸ To enforce the priorities system and maintain a constant watch over critically needed scarce materials, the WPB established a Compliance Branch with broad investigative powers, including industry-wide surveys and spot check investigations of apparent violations.⁴⁹

To address further the Government's critical needs for asbestos, and determine supplies, requirements, and allocations of raw asbestos, the WPB established the Cork, Asbestos & Fibrous Glass Division,⁵⁰ whose estimates formed the basis of production programs developed by the WPB's Requirements Committee.⁵¹ From May 1943 to July 1945, the Cork, Asbestos & Fibrous Glass Division gathered data from industry and Government sources on current and prospective, domestic and foreign asbestos supplies. The Requirements Committee of the Division issued twenty-three "Supply and Requirements Decisions" recommending allotments for certain asbestos products.⁵²

The Supply and Requirements Decisions document the military's consumption of almost the entire domestic production of asbestos-containing insulation products. For example, in Decision No. 11,⁵³ the committee estimated that (i) the Navy and the Maritime Commission would require eighty-five percent of the molded amosite insulation produced in 1944;⁵⁴ (ii) the Maritime Commission would require the total domestic output of marine insulating board made from amosite asbestos for bulkhead construction on Maritime Commission vessels;⁵⁵ and (iii) Navy and Maritime Commission shipbuilding and repair work would require the entire 1944 production of woven asbestos felt insulation.⁵⁶ In addition, the Division expected to allocate over half of the 85% magnesia high temperature insulation⁵⁷ and practically all of the sprayed asbestos insulation⁵⁸ for Navy and Maritime Commission use. Ninety-five percent of Grades C & G/1 and C & G/2 spinning fibers were to be allocated to the Navy for electrical cable construction.⁵⁹

The WPB and its predecessor agency, the OPM, also issued conservation orders. These "M Orders," or "allocation orders," controlled the distribution

and use of critical materials, and ensured that available supplies of asbestos were reserved to meet war orders first.⁶⁰ The OPM issued Conservation Order M-79 on January 20, 1942 to conserve, allocate and restrict consumption of African asbestos,⁶¹ which was used primarily for insulation products for the Navy and the Maritime Commission. Under the provisions of Conservation Order M-79, asbestos fiber imported from South Africa could only be used in the manufacture of materials necessary to fill Defense Orders defined in Priorities Regulation No. 1.⁶² Order M-79 further restricted the use of (i) Rhodesian Chrysotile asbestos Grades C&G/1 and C&G/2 to the production of electrical insulation on Navy ships and other defense purposes, and (ii) amosite asbestos fiber Grade B-1 to the production of insulation for use on Navy and Maritime Commission vessels.⁶³ The WPB further tightened restrictions on African asbestos in April 1942 after the sinking of a ship carrying 3,300 tons of African fiber.⁶⁴

In early 1942, the WPB recognized the difficulty in obtaining sufficient quantities of asbestos textiles, particularly insulation materials to meet critical military needs. On March 30, 1942, the WPB issued Conservation Order M-123, tightening the Government's control of asbestos textiles by forbidding manufacturers from delivering asbestos textiles to any entity with a priority rating below A-10.⁶⁵ Willful violators were subject to criminal prosecution.⁶⁶ Within several months, the WPB amended the order to include woven friction materials, such as brake linings, within the A-10 rating.⁶⁷

By the end of 1942, it had become apparent that the priority system was ineffective for allocating scarce asbestos textiles.⁶⁸ In early 1943, the WPB issued Conservation Order M-283, requiring allocation of 100 percent of asbestos textiles, surpassing even a AAA rating.⁶⁹ Under Order M-283, no supplier could deliver asbestos textiles, and no person could accept delivery of asbestos textiles from a supplier, except upon specific authorization by the Director General for Operations.⁷⁰ To assure continued supply of asbestos textiles for its shipbuilding program, the Government took control over both the distribution and use of asbestos-containing products by requiring manufacturers to submit shipping schedules to the WPB on a monthly basis for approval or revision.⁷¹

2. Asbestos Stockpiling

Representatives of various Government agencies and importers and processors of African asbestos first discussed asbestos stockpiling at a June 27, 1940 meeting on the topic of "A Plan for the Asbestos Procurement to Meet Present Emergency."⁷² Those present made stockpile recommendations in the event of a three-year emergency for the three types of asbestos the Government required: African Rhodesian white fiber (chrysotile), African brown fiber (amosite), and blue fiber (crocidolite) asbestos.⁷³ Similar meetings were held throughout 1940 and 1941. WPB recommendations for the stockpile of critical asbestos grades continued throughout the remaining war years.⁷⁴

The core of the stockpile program remained the Government's own purchase of scarce materials. The Government contracted to purchase asbestos—sometimes designated as public purchases—and allocated it to industries using the material.⁷⁵

Eventually, the Government assumed complete control over the importation, disposition and export of raw asbestos during the war years. In December 1941, the OPM issued General Imports Order M-63, which initially listed as "strategic materials" thirteen metals and minerals.⁷⁶ In January, 1942, the WPB amended General Import Order M-63 to include raw asbestos imported from Rhodesia and South Africa.⁷⁷

Order M-63 provided that

[t]o insure . . . adequate supplies of material for war production, no Person, other than the Metals Reserve Company and any other United States governmental department, agency or corporation, or any agent acting for such Company, department, agency or corporation, shall, without the written authorization of the Director of Priorities [of the WPB], make any contract or other arrangement for the importation of any Strategic Material.⁷⁸

Order M-63 also placed restrictions upon the *disposition* of imported strategic materials. Except as specifically provided in the Order, no owner or consignee of any M-63 material imported after the effective date of the Order was permitted to dispose of any interest in, process, or in any way change the physical condition of, transfer possession of, or change the location of, any strategic material.⁷⁹

Order M-63 permitted dispositions only (i) to the Metals Reserve Company or other Governmental agency, or (ii) with written authorization from the Director of Priorities, some other disposition of the material.⁸⁰ Any person who willfully violated any provision of the Order could be prohibited from receiving further deliveries of any material subject to allocation and, in addition, could be recommended for criminal prosecution.⁸¹

On January 6, 1943, the United States and the United Kingdom executed a "Memorandum of Understanding" on the importation of African asbestos, which set forth the principles upon which the two countries (and certain British Empire and neutral countries) would apportion asbestos imports between them to further their military vessel construction and repair goals.⁸² The Memorandum (i) apportioned estimated available supplies of African asbestos for 1943; (ii) provided for a quarterly exchange of information; (iii) encouraged substitution of more plentiful grades of asbestos for less plentiful; and (iv) provided for the appointment of a representative by each Government to recommend reapportionment of African grades of asbestos when necessary.⁸³

The Government also regulated the *export* of raw asbestos. A Presidential Proclamation of July 2, 1940 prohibited asbestos exports except under a license issued by the Department of State.⁸⁴ The regulation accompanying the proclamation defined asbestos for licensing purposes as "crude and semifabricated, chiefly of fibers of three quarters of an inch or more in length."⁸⁵

The Government's stringent control of raw asbestos imports continued until February 1, 1945; export controls were lifted on September 10, 1945.⁸⁶

3. Government Financing of Manufacturing Facilities

The Government not only controlled the supply of raw asbestos and

regulated the production and use of asbestos-containing products, but also directly encouraged the production of asbestos products by financing war facilities that produced such products.⁸⁷ The agencies accounting for the bulk of Government-financed war production facilities included the War and Navy Departments, the Maritime Commission, and the Defense Plant Corporation.⁸⁸

The Government used several types of financing agreements: (i) the Emergency Plant Facilities Contract, whereby the contractor financed the facility construction and the Government reimbursed the entire cost; (ii) the Defense Plant Corporation Lease, whereby the Government bought the plant site and the manufacturer [the lessee] acted as its agent; and (iii) a variety of other contracts under which plants were constructed at Government expense.⁸⁹ The Government assumed title or had the right to acquire title of the plants or facilities it financed, except for a narrow class of cases in which it was impractical to do so.⁹⁰

In addition, the Government allowed war-related industries to amortize over a five-year period any facility⁹¹ that the WPB tax amortization office (in conjunction with the Secretary of War and the Secretary of the Navy) had certified, by the issuance of a "certificate of necessity," as necessary for the national defense.⁹² The value of facilities so certified during World War II totalled nearly \$5 billion.⁹³

4. Government Control of Production Levels at Private Plants

The WPB also monitored and regulated asbestos production levels at private plants during the war years. As part of its effort to increase war production, the WPB launched the War Production Drive.⁹⁴ The WPB planned for and promoted the establishment of joint labor-management committees in all plants, mines, and facilities engaged in war production, and coordinated and advised these committees in their efforts to increase production and efficiency:

The sole purpose of the Joint Labor-Management War Production Drive Committee in any plant is to provide a mechanism for the team work of both labor and management to achieve *more* and *better* production. Therefore every item of possible activity which would tend to achieve this objective properly may be a subject of discussion and action of a WPB committee.⁹⁵

The WPB suggested that each committee give attention to a vast number of problems, including (i) breaking production bottlenecks; (ii) using every machine to the fullest practical extent; (iii) retooling old machines; (iv) preventing breakdowns; (v) providing maintenance, repair and good lighting; (vi) cutting down accidents; (vii) taking care of tools; (viii) conserving materials and eliminating waste; and (ix) dealing with transportation problems of plant workers.⁹⁶ The Government rewarded individuals who made suggestions that were adopted to increase production.⁹⁷

The WPB also directly recommended specific production levels at war production plants. In a November 4, 1943 memorandum, W.T. Meloy,

Director of the WPB's Cork, Asbestos & Fibrous Glass Division, expressed concern about the manpower shortage problem at plants producing certain asbestos-containing products:

[W]e are submitting a list of plants and end products where manpower should not be allowed to go below its present level, if serious bottlenecks in highly critical programs are to be avoided.⁹⁸

With respect to molded amosite and woven amosite felt insulation, Meloy noted:

These two materials are used primarily by the Navy Department for insulation on combat vessels. The material is specified outright in the case of destroyers, light and heavy cruisers, aircraft carriers and battleships.⁹⁹

In conclusion, Meloy requested that the manpower of the plants listed in his memorandum not be permitted to drop below the present minimum.¹⁰⁰

Thus, the Government, through the WPB, played an active role in controlling every level of production at private plants producing asbestos-containing products.

II. GOVERNMENT CONTROL OVER PRIVATE SHIPYARDS

A. Government Ownership of Facilities and Materials

In addition to the Government's specifications requiring asbestos in insulation products and its control over the procurement and distribution of asbestos, the Government exercised substantial control over the shipyards themselves, even those which were privately owned.¹⁰¹ The Government planned, guided and financed the building of new shipyards and the expansion of existing yards. From 1941 to 1945, the Maritime Commission and the Defense Plant Corporation spent \$503.3 million on Maritime Commission shipyard facilities,¹⁰² while the Navy's Bureau of Ships spent approximately \$1.5 billion between 1940-1945 to expand shipyard facilities.¹⁰³

The Government took title to all instruments or property assembled at the shipyards for use in the construction of its vessels, as well as title to the vessels themselves.¹⁰⁴ If a contractor defaulted, the Maritime Commission had the right to take possession of the vessels and finish the construction of the vessels.¹⁰⁵ The Government also inspected the material and workmanship on the vessels "at any and all proper times during manufacture or construction at any and all places where such manufacture or construction shall be carried on."¹⁰⁶ Disagreements between a contractor and the Government concerning inspection were referred to the Maritime Commission.¹⁰⁷

B. Shipyard Labor

To assure reliable and rapid wartime production, the Government took substantial control of shipyard working conditions, labor relations, and worker health and welfare. The Government assisted private industry through public information campaigns encouraging patriotic service on the home front, provided information on worker availability to shipyard employers,¹⁰⁸ assigned labor priorities to specific shipyards and approved all shipyard hiring.¹⁰⁹ To assure adequately skilled workers, the Government devised and financed worker training programs, and enforced training standards in all shipyards.¹¹⁰

The Government also (i) encouraged workers' efforts to secure more favorable wages and working conditions;¹¹¹ (ii) structured union-management relationships and guided the collective bargaining process;¹¹² (iii) fixed regional wage standards;¹¹³ and (iv) established working hours and schedules.¹¹⁴

The Government played a significant role in managing the labor force in both private and Government shipyards by facilitating the nationwide exchange of shipbuilding expertise, holding shipbuilding conferences, selecting and transferring managers among yards and removing ineffective managers

from private shipyards.¹¹⁵ Government auditors and inspectors at each yard oversaw finances, salaries, labor utilization, production planning and the cost efficiency of the shipyard.¹¹⁶ These auditors had such a pervasive impact on yard management that private management complained that it was operating as a “government agency.”¹¹⁷

C. Control Over Workers’ Health and Safety

The Government also assumed responsibility for the health, safety and welfare of shipyard workers in both Government and private yards.¹¹⁸ The Maritime Commission issued to shipyard medical officers periodic shipyard health and safety bulletins¹¹⁹ and assigned health and safety responsibilities to specific individuals within yard management.¹²⁰

In 1943, the Navy and Maritime Commission jointly promulgated “Minimum Requirements for Safety and Industrial Health in Contract Shipyards”¹²¹ and charged shipyard safety department and medical staffs with the implementation of these guidelines.¹²² In addition, the Navy and the Maritime Commission employed regional health and safety consultants who were sent into the field to enforce the minimum requirements¹²³ and to insist on “high standard[s] of protection and precaution” at individual shipyards.¹²⁴

The Government therefore had substantial control of the workplace and the workforce. The Government not only built shipyards, expanded facilities and controlled production, but also recruited, trained and allocated shipyard labor, supervised shipyard management, provided for shipyard workers’ social needs, and promulgated health and safety programs.

III. THE GOVERNMENT'S KNOWLEDGE OF THE HEALTH RISKS OF UNCONTROLLED, EXCESSIVE EXPOSURE TO ASBESTOS DUST DURING SHIPBUILDING AND REPAIR OPERATIONS

A. Knowledge of World War II Shipyard Conditions

The United States' massive World War II shipbuilding program focused attention on working conditions in Government shipyards and private shipyards under Government contract throughout the United States. As early as 1939, the Surgeon General of the Navy, in his Annual Report to the Secretary of the Navy,¹²⁵ demonstrated the Navy's awareness of health risks arising from uncontrolled, excessive exposures to finished asbestos-containing insulation products in shipyards:

Asbestosis is an industrial disease of the lungs incident to the inhalation of asbestos dust for prolonged periods. [W]orkers in the Pipe-Covering and Insulating Shop [of the New York Navy Yard] are exposed to the inhalation of asbestos dust incident to the cutting of asbestos insulating felt in the fabrication of covers for flanges, valves and bonnets and high temperature steam turbines. A special effort has been made to collect literature and data with regard to industrial medicine to be used for reference purposes. Special attention is given to the working conditions in hazardous occupations such as . . . asbestos pipecovering [and] amosite . . . insulation.¹²⁶

With respect to the Norfolk Naval Shipyard, the Surgeon General found that "asbestos pipe-covering" and "amosite . . . insulation" work were "hazardous occupations." The Surgeon General concluded that further research into the hazards of asbestos and strict compliance with the recommended protective measures were necessary to protect the safety and health of the workers.¹²⁷

In 1941, some two years after the Surgeon General's 1939 Report, the Commander in charge of the Navy's Division of Preventive Medicine conceded in an *internal* letter to the Surgeon General of the Navy that asbestos control measures at naval shipyards were inadequate:

Asbestosis. We are having a considerable amount of work done in asbestos and from my observations, *I am certain*

that we are not protecting the men as we should. This is a matter of official report from several of our Navy yards.¹²⁸

In 1941 and 1942, the Navy sponsored and funded industrial hygiene training courses at Harvard and Columbia Universities to prepare Government industrial hygienists for investigating and reporting occupational health problems in such Navy operations as shipbuilding.¹²⁹ Dr. Philip Drinker, Chairman of the Department of Industrial Hygiene at the Harvard University School of Public Health, organized the Navy courses. These courses included lectures on uncontrolled, excessive dust exposure and specifically identified asbestosis as a health hazard of exposure to asbestos dust.¹³⁰

James F. Morgan, who attended the Navy's course at Harvard University, recently testified before Congress that

[t]he dust diseases constituted a sizable part of this instruction, of course, and included asbestosis and silicosis.

* * *

It was in the course of this instruction at Harvard that I learned of the existence of asbestosis as a disease caused by the excessive inhalation of asbestos fibres.¹³¹

In conjunction with the industrial hygiene training program, the Navy and the Maritime Commission commissioned Dr. Drinker in 1942 to study conditions in approximately twenty East and West Coast shipyards to determine major occupational diseases.¹³² Dr. Drinker's shipyard survey team concluded, *inter alia*, that (i) asbestosis was likely to occur, and in many cases had occurred, in Government and private shipyards used for the construction and refitting of naval vessels; (ii) the incidence of asbestosis was likely to increase because insulation workers were handling asbestos with few or no precautions; (iii) asbestos could not be controlled unless the shipyards performed systematic, periodic medical examinations; and (iv) the health hazards of asbestos could only be controlled by promulgating and enforcing appropriate ventilation standards.¹³³

Several shipyards received particular attention. In one, the survey team concluded that

work at the asbestos shop created a very real asbestos hazard, as the dust and fibres were found all over the shop on rafters, machines, benches and on the workmen's clothing. The most dusty processes should be segregated into a well-ventilated room and periodic examinations of the workers' chests should be made.¹³⁴

At another, investigated in September 1942, the survey team recognized "the fact that asbestos dust can cause permanent lung damage . . . *conditions in this shop can only be regarded as alarming* and immediate steps should be taken to see that the shop is cleaned."¹³⁵

The survey report of a third stated that (i) "the conditions [in the pipecovering shop] . . . present a very real asbestosis hazard;" (ii) a "home-

made exhaust system . . . [has] practically no effect as dust spreads in all directions;" (iii) "local exhaust systems of proper design should be installed;" and (iv) "periodic physical examinations should be made."¹³⁶

In December 1942, the Navy and the Maritime Commission jointly held a conference to discuss the shipyard surveys and findings and to evaluate proposed "Minimum Requirements for Safety and Industrial Health in Contract Shipyards."¹³⁷ Numerous representatives of the United States Government attended and participated in the conference.¹³⁸ Conference speakers, including Dr. Drinker, discussed the use of respirators and other protective devices, and specifically informed attendees that "asbestosis is caused in connection with the handling of asbestos [W]e rather expect it to occur in shipyards, because we have seen asbestos being handled in installation work *with little or no precautions*."¹³⁹

Relying largely upon the 1942 shipyard surveys and recommendations discussed at the December 1942 conference, the Navy and the Maritime Commission jointly promulgated "Minimum Requirements for Safety and Industrial Health in Contract Shipyards" in February 1943.¹⁴⁰ The Government thereupon sent a copy of the Minimum Requirements to each shipyard holding contracts with the Navy and the Maritime Commission. Each report was accompanied by a letter signed by the Secretary of the Navy and the Chairman of the Maritime Commission stating that "[e]ach [shipyard] is hereby given notice that the Navy Department and the Maritime Commission will expect full and complete compliance with the minimum standards, . . . and each is requested to give full cooperation to the consultants on health and safety who will be charged with the coordination and supervision of the safety and health programs of the two agencies."¹⁴¹ Because of the risk of asbestosis, which was identified as an "industrial disease in shipyards,"¹⁴² the Minimum Requirements mandated that each shipyard (i) appoint a full-time safety director and staff; (ii) select a ventilation supervisor on each shift to be responsible to the head of the safety program; (iii) install ventilation equipment to remove air impurities causing health hazards; (iv) provide respiratory protective equipment for jobs involving exposure to asbestos; and (v) assign to each exposed worker his own respirator.¹⁴³

Thus, by 1943, the Government had (1) recognized its responsibility for the health and safety of Government and contract shipyard workers; (2) acknowledged, at least internally, that shipyard workers were potentially exposed to serious health risks; (3) promulgated standards designed to protect the workers; and (4) acknowledged that, if its safety standards were to be effective in safeguarding the workers, they had to be strictly and faithfully enforced. The Government continued, however, to abdicate its responsibility *by failing for at least another 30 years to implement or enforce its own safety standards in any meaningful way*.

From 1943 through 1945, the Navy and the Maritime Commission conducted occupational health and safety surveys of approximately 130 shipyards to ascertain compliance with the Minimum Requirements.¹⁴⁴ From the reports of those surveys, the Government learned that many shipyards were failing to meet the Minimum Requirements and that shipyard insulation work created an asbestosis hazard.¹⁴⁵ The cover page of each survey report was

marked "Restricted to Addressee" and included the following legend:

This document contains information affecting the national defense of the United States within the meaning of the espionage Act 50 U.S.C., 31 and 32. Its transmission or the revelation of its contents in any manner to an unauthorized person is prohibited by law.

The restrictions on distribution of most of the survey reports were removed *in the 1980's*.

At one shipyard, the survey team observed that the potential danger of excessive exposure to asbestos dust warranted continued measurement of dust concentrations.¹⁴⁶ Two years later, the survey team reported that no dust counts had been taken and that "[i]t was evident that no improvements in the [asbestos] shop had been made and the hazard still exists."¹⁴⁷

At another shipyard, the survey team recognized that exposure to asbestos dust was "capable of causing the disabling occupational disease, asbestosis."¹⁴⁸ The report observed that "[t]he accumulation of [asbestos] dust on rafters and wires as well as conspicuous quantities of dust floating in the air of the [cutting] room point to a dangerous dust hazard."¹⁴⁹

Another report stated that workers in the pipe-covering shop "reported that conditions became very bad at times, and the accumulations of dust on wiring and structural members of the building bore out their statement."¹⁵⁰ The report concluded that "[p]rolonged inhalation of asbestos dust may result in a disabling lung condition known as asbestosis."¹⁵¹

The team that surveyed a shipyard in Portland, Oregon reported that, in the asbestos lagging shop, "[n]o effort is made to control the dust from the various operations, nor are workers exposed to this hazard examined or furnished with respiratory protective equipment."¹⁵²

The survey reports of industrial health inspections at a private shipyard under contract with the Navy revealed that pipecoverers at the shipyard had contracted asbestosis as a result of their exposure to amosite asbestos dust. This shipyard was first surveyed in 1942, prior to the promulgation of the Minimum Requirements. The survey team concluded at that time that "the conditions [in the pipecovering shop] . . . present a very real asbestosis hazard."¹⁵³ In 1944, the Government's health consultants, including then-Lieutenant Commander Walter E. Fleischer, reported that, of 38 shipyard workers who had handled amosite asbestos pipecovering for two to nine years, 12 of them, or over 30 percent, "showed significant x-ray changes consistent with exposure to a dusty environment."¹⁵⁴ The 1944 report further noted that the chest x-rays of two of the twelve workers "were consistent with the diagnosis of well established asbestosis;" the x-rays of four workers "were consistent with a diagnosis of asbestosis;" and six additional workers' chest films "showed minimal changes, but not sufficient for a definite diagnosis of asbestosis."¹⁵⁵ In its final report in 1945, the Navy/Maritime Commission survey team reiterated that chest x-rays of six workers in the pipecovering shop had findings consistent with the diagnosis of asbestosis.¹⁵⁶

As a result of these findings, the Navy Bureau of Ships arranged in February 1945¹⁵⁷ to have chest x-rays of pipecoverers from two Naval ship-

yards and two Navy contract yards examined for signs of asbestosis.¹⁵⁸ The premise for the study, which was performed by then-Commander Fleischer, Assistant Chief Health Consultant of the Navy, and Dr. Philip Drinker, among others, was that

[a]n industrial health inspection of an important U.S. Navy Contract Yard indicated that dustiness from miscellaneous pipe covering operations was considerable and that a few of the employees had what appeared to be asbestosis.

It was not felt that experience in a single yard was enough to justify any general statements on working conditions in other yards, and certainly was no cause for alarm, but the results warranted check-ups elsewhere.¹⁵⁹

Upon completion of the study, the survey team found that, of 1074 pipecoverers x-rayed, only three, each with over twenty years of exposure to asbestos, showed x-ray signs of asbestosis.¹⁶⁰ As a result, despite voluminous evidence to the contrary which the Government had documented in *confidential, classified* reports of shipyard health and safety surveys and other internal documents,¹⁶¹ the Fleischer-Drinker Report concluded that virtually all shipyard exposures to asbestos were below the five million p.p.c.f. (parts per cubic foot) threshold level, and that working with and around asbestos-containing materials in shipyards was “not a dangerous occupation.”¹⁶²

Notwithstanding the conclusions in the Fleischer-Drinker Report, at the time the report was published, the Government knew, from shipyard survey reports and other internal documents, that shipyard workers at Government and contract shipyards were not being protected from exposure to excessive concentrations of asbestos dust and that many workers had contracted or would contract pulmonary disease as a result.

B. Post-World War II Government Knowledge

After World War II, the Government continued to conduct research and accumulate documentation on the health risks of uncontrolled, excessive exposure to asbestos. In February 1951, for example, Dr. Wilhelm C. Hueper, Chief of the Environmental Cancer Section of the National Cancer Institute, concluded that a causal relationship between asbestosis and lung cancer “appeared very likely.”¹⁶³ In a subsequent report published by the Public Health Service in 1955, Dr. Hueper concluded that “the epidemiologic and pathologic evidence supporting a causal relationship between asbestosis and cancer of the lung . . . is quite substantial.”¹⁶⁴

In that same year, the Navy Bureau of Medicine and Surgery finally (i) adopted the five million p.p.c.f. threshold limit value for asbestos dust, which the Public Health Service had recommended *nearly seventeen years earlier*,¹⁶⁵ and (ii) required that pipecoverers be given yearly x-rays to monitor health problems arising from asbestos exposure.¹⁶⁶

In 1957, Boston Naval Shipyard, one of the yards included in the 1945 Fleischer-Drinker Report, hosted a Pipe and Copper Shop Master Mechanics’

Conference. At the conference, Mr. O.W. Meeker from Long Beach Naval Shipyard, in a presentation entitled "Pipe Insulation Processes and Procedures," identified asbestosis as "one of the most insidious of occupational diseases."¹⁶⁷ In a colloquy that followed Mr. Meeker's presentation, L.W. Ferris, Master of Shop 56 (Pipe Shop) at New York Naval Shipyard, reported that, by 1957, shipyard workers had brought at least fourteen asbestos-related cases against the Government:

In one part of Mr. Meeker's speech it was very interesting due to the fact that a couple of years ago this Asbestosis in the workers was quite a scare. As you know, a person using this material has to be x-rayed at regular periods, they will tell him to come back in a much shorter interval Fourteen out of one hundred and twenty-six had Asbestosis, and possibly by now a higher percentage have it. Attention was brought sometime ago to the high rate of sick leave for lung and throat trouble, and the Hygiene Officer, said there was nothing to it. Then we had a letter from the Bureau. The order is for them to wear masks, because fourteen people have brought suit against the Government. Now, if you haven't told these people to put on masks, you are more or less the cause of their trouble. You are knocking the Government case into a cocked hat.¹⁶⁸

In October 1962, William Marr, Industrial Hygienist at the Long Beach Naval Shipyard, reported in a Navy publication that *insufficient precautions had been taken at naval shipyards to protect workers against asbestosis*.¹⁶⁹ Again in 1964, Mr. Marr reported to the Navy that adequate ventilation for shipyard insulation workers could not be achieved with the ventilating systems at Long Beach Naval Shipyard and that the workers therefore were being exposed to hazardous asbestos dust conditions.¹⁷⁰

C. Dr. Selikoff's Warning to the Government Regarding the Health Hazards of Asbestos Exposure

At about the same time Mr. Marr published the Long Beach study, researchers at Mount Sinai Hospital in New York City reported the results of a private non-governmental study of asbestosis among insulation workers.¹⁷¹ The Mount Sinai study indicated that personnel working with asbestos-containing industrial insulation materials may have been exposed to health risks, and discussed the need for further evaluation, study and increased efforts to enforce safe work practices in the insulation trade.¹⁷² The Mount Sinai study was presented at an October 1964 meeting of the New York Academy of Sciences,¹⁷³ and representatives of the Government, including military personnel, attended that meeting. In 1965, Dr. Irving Selikoff, Director of the Environmental Sciences Laboratory at Mt. Sinai Hospital, published a report concluding that "[a]sbestosis and its complications are significant hazards among insulation workers in the United States at this time."¹⁷⁴

In 1964, asbestos dust counts taken at the Norfolk Naval Shipyard revealed that pipecoverers and insulators were being exposed to dust counts of up to 50 million p.p.c.f. and occasionally higher.¹⁷⁵ Again in June of 1965, the Norfolk shipyard recorded dust counts during the ripout of asbestos insulation from naval ships ranging from 30 million to 115 million p.p.c.f. in the workers' breathing zone.¹⁷⁶ In 1967, dust counts reached 108 million p.p.c.f., which greatly exceeded the 5 million p.p.c.f. threshold level of dust concentration recommended by the Public Health Service *some 29 years earlier*.¹⁷⁷ Indeed, conditions were so bad during ripout operations at Norfolk Naval Shipyard that Navy officials reported in 1968 that "additional future disability claims may result from continued neglect of [the Government] supervisor's responsibility" to ensure the use of respirators during such operations.¹⁷⁸

Similarly, in 1968, a Puget Sound Naval Shipyard report summarized the results of a two-and-one-half year study of insulation workers exposed to asbestos or asbestos-containing materials:¹⁷⁹

If working conditions remain the same, about 20% of the insulation workers at Puget Sound Naval Shipyard can be expected to have some pulmonary abnormalities distinguishable by chest x-rays after 15 years in the trade.¹⁸⁰

In 1968, Dr. Selikoff reported to representatives of the Public Health Service, the Navy Bureau of Medicine and Surgery, and the Department of Labor that autopsies of shipyard asbestos workers performed at Mt. Sinai Hospital revealed an unusual incidence of asbestosis.¹⁸¹ That same year, Dr. Selikoff testified before the Select Subcommittee on Labor of the House Committee on Education and Labor:

It is evident that . . . we have failed these men [asbestos insulation workers]. They had every right to look to their *Government and public health authorities*, and to the physicians and scientists who guide them, for protection at their work. They were not given this protection.¹⁸²

D. The Government's Reaction to Dr. Selikoff's Report

As a result of publicity generated by Dr. Selikoff's findings, Captain W.R. Riblett of the Navy unequivocally admitted in a 1968 *internal* Navy memorandum that the Navy's shipyards had "for many years been aware of the hazards of asbestos."¹⁸³

During the following year, the Navy, through the Bureau of Medicine and Surgery and the Naval Sea Systems Command, undertook to evaluate all facets of the Navy's use of asbestos products, including an assessment of asbestos-related diseases and exposure-control measures. In this regard, the Navy surveyed naval and private shipyards to determine the uses of asbestos, suitable substitutes, rationales for material selection, safety precautions observed and relative costs of materials and installation.¹⁸⁴ The Navy also surveyed suppliers and manufacturers to determine what materials were avail-

able, what materials were under development, the safety precautions observed during manufacture and safety precautions recommended, as well as material and installation costs.¹⁸⁵

Despite the dissemination of information throughout the Navy regarding the risks of uncontrolled, excessive exposure to asbestos, Admiral Hyman G. Rickover was prompted to forward a memorandum to the Commander of the Naval Ships Systems Command on September 22, 1970, which stated:

I am concerned that asbestos continues to be used extensively by the Navy in the fabrication, installation, repair and renewal of pipe and boiler insulation. Many years of medical research have firmly established the serious effects of inhaled asbestos fibres reaching the lungs and resulting in lung cancer and asbestosis.¹⁸⁶

Notwithstanding such admonitions—and notwithstanding the Navy's full-blown evaluation in 1969 of asbestos health risks due to the uncontrolled, excessive exposures of the past—the Navy failed to comply with its own health and safety standards.

E. The Government's Continuing Failure to Enforce Asbestos Control Measures In Government Shipyards

In 1979, the United States Comptroller General concluded that the Navy even then was failing to take adequate precautions to protect its shipyard employees.¹⁸⁷ The Comptroller General reported, for example, that the log book of the asbestos inspector at Long Beach Naval Shipyard contains "entries [that] showed that [asbestos control] program violations occurred frequently and that some exposure of unprotected workers may have resulted."¹⁸⁸

Incredibly, as late as 1983, a preliminary analysis of hundreds of asbestos exposure reports prepared by health inspectors at one naval shipyard identified thousands of workers who had been exposed to asbestos far in excess of permissible limits established under federal law¹⁸⁹ and the Navy's own regulations.¹⁹⁰ These reports document uncontrolled, excessive exposure to asbestos in 1983 and 1984 due to inadequate training of personnel, lax enforcement and willful disregard of asbestos control procedures and regulations established to protect workers.

IV. THE NEED FOR LEGISLATION

A. The Cost of the Asbestos Litigation

Although most asbestos claimants have access to the workers' compensation system, few have sought benefits from workers' compensation programs.¹⁹¹ They have instead turned to the tort system for redress primarily because tort awards have been higher than workers' compensation payments.¹⁹² Due to the fact that the Government is immune from suit by its former civilian shipyard worker employees,¹⁹³ the manufacturers have become the target of nearly all asbestos-related disease claims for injuries incurred as the result of uncontrolled, excessive shipyard exposures.

Since the early 1970's, over 35,000 claims have been filed in courts throughout the United States against the former manufacturers, miners, suppliers and distributors of asbestos-containing insulation products. New suits currently are being filed at the rate of 700 a month. In the words of one court, "[i]n the last fifteen years since the filing of the first suits, the field of asbestos litigation has exploded."¹⁹⁴ Estimates of the number of new personal injury suits that manufacturers may expect in the next thirty years range from 32,000 to 200,000.¹⁹⁵

Between 1970 and 1982, the manufacturers and their insurers¹⁹⁶ expended over \$1 billion in litigation expenses, damage awards and settlements,¹⁹⁷ including \$39,567,003 in punitive damages awarded in only twenty-one cases.¹⁹⁸ The manufacturers' future liability has been estimated at between \$4 billion and \$87 billion.¹⁹⁹ As a result of these severe financial burdens, several manufacturers have filed for reorganization under Chapter 11 of the Federal Bankruptcy Act of 1979.²⁰⁰

In an attempt to reduce the costs of litigation, thirty-four manufacturers and sixteen insurers agreed on June 19, 1985 to establish an "Asbestos Claims Facility" designed to provide an alternative to litigation.²⁰¹ The negotiations were chaired by Harry Wellington, former Dean of the Yale Law School, under the auspices of the Center for Public Resources, New York City.²⁰² As a result, the agreement is known as the "Wellington Agreement."

The Asbestos Claims Facility is organized as a nonprofit corporation which has the authority to evaluate, settle, pay or defend all asbestos-related claims against Wellington members.²⁰³ The amount of compensation the facility will pay for each claim is determined through negotiation, arbitration or trial.²⁰⁴ The goals underlying the Wellington Agreement include encouraging and facilitating negotiated settlement; promoting fair, consistent and timely claim resolution; and encouraging waiver of punitive damage claims.²⁰⁵

Since the establishment of the Wellington Facility, the number of law firms representing the participants in the asbestos litigation had dropped from 1000 to 63.²⁰⁶ However, although the Government was invited to become a member of Wellington (as a stop-gap measure before promulgation of legisla-

tion), the Government refused to participate. Furthermore, certain producers, insurers, and reinsurers remain reluctant to join the Asbestos Claims Facility, and lawyers for plaintiffs are still skeptical about whether the Facility will offer adequate settlements.²⁰⁷ Thus, uncertainties remain regarding whether enough claims will be brought to, and disposed by, the Wellington Facility, and whether enough companies will participate to reduce the litigation substantially.

The manufacturers' costs of litigating asbestos claims are only one facet of the total picture. As of September 30, 1984, federal district and appellate courts had expended \$10.1 million to process asbestos-related cases during fiscal year 1984 alone.²⁰⁸

In addition to the shipyard workers' personal injury litigation, the manufacturers have brought claims for contribution and indemnity against the United States to recover payments they made to the underlying shipyard worker claimants.²⁰⁹ The Department of Justice, which represents the United States in the asbestos litigation, spent a total of \$11.1 million in 1983 and 1984 to defend the Government against the manufacturers' asbestos-related claims.²¹⁰ The Department of Justice estimates that by the end of 1987, the pending caseload against the Government will include 11,603 cases involving 152,986 claimants for a total of \$25.4 billion.²¹¹

Attorney General Edwin Meese, III recently testified before Congress that for fiscal year 1987, the Department of Justice is requesting 114 new positions and approximately \$5.8 million, the largest segment of which is to "defend tort claims involving asbestos and radiation exposure as well as contract claims."²¹² Moreover, the Department of Justice, in its Budget Request for Fiscal Year 1987, is seeking \$2.5 million to acquire automated litigation support services needed for the "mammoth asbestos litigation."²¹³ Even these astronomical figures are dwarfed by the Government's recent revelation that the United States is spending literally "hundreds of millions" of dollars per year in total costs related to asbestos disease.²¹⁴

Thus, as the dissent noted in *Jackson I*, the monetary drain of the asbestos litigation may create the situation where later-filing, but equally deserving plaintiffs will find that all funds have long since been depleted:

We are confronted with an already astronomical and still growing number of plaintiffs seeking individual recoveries against a finite pool of assets belonging to a relatively small group of defendants. Because the insidious diseases giving rise to these claims have latency periods ranging up to forty years, the injuries of many plaintiffs will not become manifest for years to come. There is a real and present danger that the available assets will be exhausted before those later victims can seek the compensation to which they are entitled.²¹⁵

Funding is not the only problem. At the present stage of the litigation, the American judicial system is unable to handle the sheer volume of cases.

B. The Burdens on the Judicial System

According to a recent study by the Rand Corporation's Institute for Civil Justice, the asbestos litigation has reached its mature, or "phase three" stage.²¹⁶ During the first phase, in the 1970's, plaintiffs' attorneys "won several important victories by applying the theory of strict liability to latent torts and successfully challeng[ed] the exclusivity of the workers' compensation system."²¹⁷

Plaintiffs' initial victories created what the Rand study refers to as "phase two" of the litigation, which was characterized by a surge in tort filings between 1978 and 1982, with a concomitant decline in workers' compensation filings.²¹⁸ However, during the same period, four manufacturers, including Johns-Manville, which was the largest producer of asbestos and asbestos-containing products, declared bankruptcy.²¹⁹

The pace of the litigation slowed as the bankruptcy filings automatically stayed the litigation against the debtor corporations.²²⁰ In the ensuing months, the courts initially stayed *all* litigation, pending a determination of the effects of the bankruptcies on the participation of the non-bankrupt defendants in the asbestos litigation.²²¹ The non-bankrupt defendants argued, to no avail, that the courts should stay all litigation against them as well.²²² As a result, with the Manville Corporation out of the picture, the amount of individual recoveries dropped, in some instances, by thirty percent.²²³

The Rand study found that in the present stage of the asbestos litigation, the weaknesses of the American tort system are "vividly displayed:"²²⁴

Injured workers have little power,²²⁵ lawyers have conflicting interests, courts defer to other priorities, dispositions are slow, recoveries are inconsistent, medical discovery is tailored to trials that do not take place rather than settlements that do, legal battles are repetitive, and transaction costs are high. *Of these problems, the most serious are the high costs, slow pace, variation in outcomes, limits to individualized responses, and the ad hoc process through which group dispositions have been adopted.*²²⁶

The burdens on the court system and the necessity for congressional action to relieve those burdens were addressed in a second dissenting opinion in *Jackson v. Johns-Manville Sales Corp.*²²⁷ The five dissenting judges again argued that (i) the asbestos cases in question exceeded the limits of ordinary case and controversy litigation in our complex, interrelated society; (ii) there are a host of tomorrow's claimants who deserve to share in the finite proceeds which a limited group of defendants can provide; (iii) given this situation, the proper judicial response should be one based on a broad view of the whole question; (iv) a national problem has been adjudicated as though it were a state problem; and (v) the problems courts face in the asbestos litigation are ones of national policy, the response to which is beyond the ability of any diversity-based court.

The dissent argued that national policies "cannot be subject to the whims

of individual states because matters of *national public policy have nationwide application*.²²⁸ The dissent concluded that legislation is the answer to the asbestos problem, but noted that:

[T]he court is frustrated by lack of congressional action. A number of legislative solutions has been proposed for the problems we must confront today and tomorrow throughout America because of yesterday's production and use of asbestos. None has been enacted. Clearly the powers of Congress to tax and regulate give that forum the interstate reach and flexibility needed to allocate the relatively scarce resources that must be available to present and future claimants to achieve the greatest good for society.²²⁹

The institution of a national compensation fund to which all responsible parties—asbestos mining companies, manufacturers, employers, insurers, and the Government—contribute, would remove the issue from the courts and guarantee claimants timely and predictable payment upon confirmation of his disease by medical authorities.²³⁰

C. Proposed Legislation

Asbestos legislation has been under consideration in Congress for about ten years.²³¹ Two proposals are now under consideration: (1) H.R. 1626 the Asbestos Workers' Recovery Act ("AWRA"), introduced in 1984 and again in 1985 in the House of Representatives²³² by Representative Austin Murphy (D-Pa.) and 64 co-sponsors;²³³ and (2) H.R. 3090, the Occupational Disease Compensation Act of 1985 ("ODCA"), introduced in July 1985 by Representative Pat Williams (D-Mont.).²³⁴

Representative Murphy's bill would (1) replace complex tort litigation with an administrative compensation system, (2) provide injured workers with prompt compensation, and (3) obviate the legal costs and extended delay involved in litigation.²³⁵

Because the majority of asbestos disease victims claim to have been exposed to asbestos while working in government-controlled shipyards during and after World War II, the Murphy bill recognizes expressly that a national solution to the asbestos problem is essential, that the Government shares in the responsibility for asbestos-related diseases and, therefore, has a responsibility to participate in the compensation scheme. The bill also provides that existing state workers' compensation programs should remain the primary vehicle for providing benefits for asbestos disease.²³⁶

The Occupational Disease Compensation Act proposed by Congressman Williams would create a new federal workers' compensation program within the Department of Labor, but the bill would not provide for Government contributions to the fund. The Murphy bill is far superior to the Williams' proposal, particularly because it recognizes that without Government participation there can be no national solution to the asbestos problem.

1. Major Provisions of the Murphy Bill

a. Supplemental Benefits

Under the AWRA, a worker would first file an asbestos-related disease claim with the appropriate state or federal workers' compensation program. Approval of that claim would automatically entitle the worker to the "supplemental benefit" authorized by the AWRA. If the state workers' compensation were inadequate, the worker would still be eligible to apply for the federal supplemental benefit.

For total disability or death, the Murphy bill would provide a maximum supplemental benefit ninety-two times greater than the state-wide average weekly wage.²³⁷ The maximum supplemental benefit would be approximately equal to the net amount that asbestos plaintiffs obtain through the tort system—that is, about \$35,000.

For partial disability, the bill provides compensation in proportion to the degree of disability. The compensation level can be recalculated upon significant additional loss of earning capacity or upon total disability or death,²³⁸ or reduced in cases in which disability or death resulted only in part from exposure to asbestos, if the applicable workers' compensation law provides for such a reduction.²³⁹ Payment could be made in a lump sum, but the claimant could elect to have all or a portion of the supplemental benefit paid in the form of an annuity.²⁴⁰

b. Claims Procedure

The AWRA would require a claimant to submit claims to the Secretary of Health and Human Services,²⁴¹ who would use the same personnel and procedures used to evaluate claims for supplemental Social Security disability benefits.²⁴² Generally, before filing a claim for a supplemental benefit, the claimant would have to apply for workers' compensation from the appropriate state or federal agency.²⁴³ Where the applicable workers' compensation program determined the nature and extent of any disability (or whether the injury was caused by occupational exposure to asbestos), the Secretary of Health and Human Services would rely exclusively on those determinations.²⁴⁴ This would eliminate the need for a new, costly federal bureaucracy.

c. Funding of Costs

Under the AWRA, each asbestos defendant, including the United States,²⁴⁵ would be charged semi-annually a percentage of the total amount paid out in that period.²⁴⁶ The asbestos defendants other than the United States would be required to enter into an agreement governing the allocation of each company's responsibility to pay assessments for deposit in the new "Asbestos-Related Disease Trust Fund" in the Department of the Treasury.²⁴⁷ Included within this deposit would be the *fifty percent contribution of the United States*, which together with short-term loans from the Treasury for start-up and similar purposes, *could not exceed a \$150 million appropriation for any fiscal year.*²⁴⁸

d. Third-party and Tort Actions

The supplemental benefits under the AWRA, together with any workers' compensation for which the claimant is eligible, would be a claimant's exclusive remedy for damages resulting from occupational exposure to asbestos.²⁴⁹ Any asbestos defendant (including the United States) and any insurance company that paid an assessment would be *exempt from all liability* for asbestos-related damage except under a workers' compensation law.²⁵⁰

2. The "Occupational Disease Compensation Act"

Congressman Williams' Occupational Disease Compensation Act, H.R. 3090, would create a new federal workers' compensation program operated within existing administrative structures at the Department of Labor.²⁵¹ The program would be designed to provide benefits to workers who suffer occupational diseases and their survivors.²⁵² Unlike the Murphy bill, the ODCA provides that for diseases covered under the Act, existing state workers' compensation programs would be preempted by the new federal program.²⁵³

Under the ODCA, benefits would be funded entirely from a federal insurance pool with premiums paid by responsible employers and the producers of asbestos.²⁵⁴ Covered employers and producers would have to purchase insurance to cover their liability under the ODCA.²⁵⁵ *The Government would not contribute to the fund or pay for administration of the benefits program.*²⁵⁶ Industry and its insurers would foot the entire bill.

3. New Proposals

Members of the House of Representatives currently are drafting a "hybrid" bill²⁵⁷ combining portions of the Murphy and Williams proposals for introduction in 1986.

Under the proposed legislation, corporations presently forced to defend against thousands of lawsuits would be able to predict their compensation expenses, make definable contributions to the fund, and get on with their business.

V. THE FAIRNESS OF HAVING THE GOVERNMENT SHARE LIABILITY

A. The Government's Posture in the Litigation

Currently, the manufacturers are pursuing their legal claims against the Government under the Tucker Act,²⁵⁸ which confers upon the United States Claims Court exclusive jurisdiction over all contract claims against the United States in excess of \$10,000, and under the Federal Tort Claims Act ("FTCA"),²⁵⁹ which waives the sovereign immunity of the United States, and confers upon the federal district courts jurisdiction over tort suits against the Federal Government.

1. Tucker Act Claims

The manufacturers' Tucker Act claims against the Government arise out of the Government's breach of contractual obligations undertaken by the Government in the course of its design and procurement of insulation products from the plaintiff manufacturers. Among other things, the manufacturers allege that the United States, under well-established principles of federal Government contract law, warranted that products manufactured in compliance with mandatory contract specifications developed, promulgated and contractually enforced by the Navy (and other Government agencies) would be safe for their intended use.

In 1983, the Government moved to dismiss several manufacturers' Tucker Act complaints. The Claims Court denied the motion after briefing and oral argument.²⁶⁰

2. FTCA Claims

The manufacturers' tort claims arise from the fact that the United States acted wrongfully and negligently in, among other things, (i) requiring the use of asbestos in its insulation products despite knowledge of the health risks attendant to such use, (ii) knowingly creating and maintaining grossly unsafe working conditions at the nation's shipyards and aboard naval and merchant vessels, and (iii) failing to warn its shipyard workers of the known dangers of asbestos products or of available protective equipment and procedures.

Under the FTCA, a tort claim may be asserted against the United States either (i) by means of a third-party complaint in the underlying litigation²⁶¹ or (ii) after the filing of an administrative claim pursuant to 28 U.S.C. § 2675(a).

Litigation of FTCA claims on a piecemeal case-by-case basis is impractical. For this reason (and in light of the fact that the underlying personal injury cases are necessarily being settled voluntarily to the greatest extent possible), some manufacturers have sought to present the bulk of their tort claims through the amended FTCA administrative notice procedure established in

1966.²⁶² It has been in this arena that the Government's refusal to meet the merits of those claims has been most disturbing.

The entire purpose of the 1966 FTCA amendments was to facilitate matters by permitting the voluntary settlement of any cases in which the agency chooses not to contest liability. However, the Government has taken the position that the manufacturers' asbestos-related FTCA claims have failed to provide sufficient detail to permit the Government to investigate the possibility of settling those claims.²⁶³

The Department of Justice is singing two different and discordant songs—one to the courts, and another to Congress. To the courts, it asserts that the manufacturers have failed to satisfy the procedural requirements of the FTCA and that it (the Government) cannot therefore decide whether to settle or to deny the manufacturers' claims. The Government argues that the United States cannot evaluate the manufacturers' claims intelligently and realistically based upon the skeletal information provided in the administrative filings.

Before Congress, however, the Government has made perfectly clear that it *has already decided that it will not, under any circumstances, settle the manufacturer's tort claims.* In its request to the Congress for Fiscal Year 1986 budget authorization, the Department of Justice reported that

[t]he [Civil] Division has mounted an aggressive defensive campaign and implemented a *policy of rejecting any and all asbestos settlement offers.* The results to date are impressive. . . . This record was achieved in the face of a rapidly expanding caseload and prior to the recent addition of adequate staff necessary to manage and conduct a centralized asbestos defense effort. With the infusion of additional personnel and state-of-the-art application of automated litigation support to facilitate storage and retrieval of the vast asbestos document collection, the [Torts] Branch is mounting an aggressive, nationwide defense to the challenge to the public treasury by the asbestos industry and its insurers.²⁶⁴

In other words, the Department of Justice is spending millions of dollars—and committing itself to the expenditure of many more millions of dollars—to wage an all-out asbestos litigation war. That money, and the additional millions of dollars the manufacturers are expending in pursuit of their meritorious tort claims against the Government, would be better spent by participation in a compensation fund established by Congress. If the asbestos litigation explosion stemming from the legacy of World War II shipbuilding exposures has demonstrated anything, it has shown the wastefulness of endless litigation for litigation's sake.

B. Equities of Having All Responsible Parties Participate in Recompensing Victims

In light of the Government's complete control of the World War II shipbuilding uses of asbestos, the question before Congress is simple. Should

the Government be permitted to shirk its responsibility for the uncontrolled excessive exposures and hazardous working conditions which it created and allowed to persist, causing disease in workers whom the Government mandated would work in those workplaces? No impartial person looking at this situation could conclude anything but that the Government must assume its fair and equitable share of the burden to the nation's health caused by the massive World War II shipbuilding efforts.

The manufacturers have gone to Congress to seek relief from the overwhelming burden so far only they have borne. The Government must accept some level of responsibility for (i) specifying a material it knew, by virtue of classified confidential studies, was hazardous to shipyard workers excessively exposed to asbestos in an uncontrolled environment; (ii) continuing to insist on uncontrolled use after gaining considerable, confidential and conclusive knowledge of the health risks due to past excessive exposures; (iii) controlling industrial production through wartime contracts and through the War Production Board's allocation of raw asbestos; and (iv) failing to implement and enforce OSHA regulations to protect its own workers from known health hazards of occupational exposure to asbestos.

Unless Congress acts and recognizes the dire necessity for dealing fairly with this national problem—a problem which threatens our judicial system with an unmanageable burden—only chaos and economic disaster will continue to prevail. Without a legislative scheme, otherwise successful companies will face the threat of bankruptcy, legitimate claims will be dissipated or go unpaid, many thousands of jobs will be lost, and the courts of our Nation will be inundated by many more lawsuits than those already filed. The Government must recognize its obligation to those shipyard workers who in the past were exposed excessively in an uncontrolled environment to a material necessary for the success of our nation's World War II victory. To ameliorate this legacy of the past, the time for congressional action is seriously overdue.

NOTES

¹Clifton, *Asbestos*, MINERAL FACTS AND PROBLEMS 55, 56, 60, 62 (U.S. Bureau of Mines 1980 ed.).

²Broder, *The Magic Mineral*, THE NEW YORKER, October 12, 1968, at 117.

³*Id.* at 118.

⁴Asbestos is currently used in such products as asbestos cement sheets and pipe, gaskets, packing materials, roofing products and friction materials. In each of these products the asbestos fiber is locked in, or encapsulated to prevent its escape into the environment.

⁵See Navy Department Specification 32P2 for Asbestos Plaster for Pipe Covering, Etc. (May 31, 1910) (superseding "Specifications" approved July 16, 1896); Navy Department Specification 32P1 for Asbestos Plaster Cement for Fire Surfaces (June 1, 1911) (superseding "Specifications" approved July 16, 1896).

⁶I. SELIKOFF, E. HAMMOND & H. SEIDMAN, MORTALITY EXPERIENCE OF INSULATION WORKERS IN THE UNITED STATES AND CANADA, 1943-1976, at 3 (Environmental Sciences Laboratory, Mount Sinai School of Medicine of the City University of New York, 1978).

⁷*Id.*

⁸See U.S. BUREAU OF MINES, DEPARTMENT OF THE INTERIOR, 1950 MATERIALS SURVEY: ASBESTOS, Table 9 at IX-2, (February 1952).

⁹See *infra* section I.D.

¹⁰U.S. BUREAU OF MINES, DEPARTMENT OF THE INTERIOR, *supra* note 8, at Table 9.

¹¹See *infra* Section IV.

¹²By 1983, 51 percent of pending claims had been brought by shipyard workers, 12 percent by asbestos factory workers, 14 percent by insulation workers and 23 percent by "other" and "unknown" groups combined. J. KAKALIK, P. EBENER, W. FELSTINER & M. SHANLEY, COSTS OF ASBESTOS LITIGATION 15 (Rand Corporation, Institute for Civil Justice, No. R-3042-ICJ, 1983) [hereinafter cited as COSTS OF ASBESTOS LITIGATION].

¹³The latency period between exposure to asbestos and the onset of such asbestos-related diseases as asbestosis (a pneumoconiosis or lung fibrosis) or mesothelioma (a rare cancer associated with asbestos exposure) is between twenty and thirty years. *Occupational Safety and Health: Hearings on H.R. 14816 Before the Select Subcomm. on Labor of the House Comm. on Education and Labor*, 90th Cong., 2d. Sess. 351 (1968) (statement of Dr. Irving Selikoff) [hereinafter cited as *Selikoff Statement*].

¹⁴*Jackson v. Johns-Manville Sales Corp.*, 750 F.2d 1314, 1327 (5th Cir. 1985)(en banc).

¹⁵See, e.g., F. LANE, SHIPS FOR VICTORY 3, 60-66 (1951) [hereinafter cited as SHIPS FOR VICTORY]; H. ROGERS & J. FRIEDMAN, SHIPBUILDING AND THE DEFENSE PROGRAM 1-2 (1941) (Office of Production Management, Bureau of Research and Statistics).

¹⁶Lawton, Barboo & Sullivan, *Significance and Description of Exposures in the Fabrication, Installation and Removal of Asbestos Material In United States Navy Shipyards*, 1971 ENVIRONMENTAL HYGIENE 77, 77 [hereinafter cited as *Lawton Report*].

¹⁷I. Selikoff & E. Hammond, *Asbestos-associated Disease in United States Shipyards*, 28 CA A CANCER JOURNAL FOR CLINICIANS 87, 89 (March/April 1978). Another authority estimates the total as between 3.0 and 3.5 million. *Lawton Report*, *supra* note 16, at 77.

¹⁸*Compensation For Occupational Diseases: Hearings on H.R. 1626 and H.R. 3090 Before the Subcomm. on Labor Standards of the House Comm. on Education and Labor*, 99th Cong., 1st Sess. 343 (1985) (statement of Frank V. Connolly, former Director of the Special Rating Division of the War Production Board) [hereinafter cited as *Connolly Statement*].

¹⁹*Id.* at 343; G. FISCHER, A STATISTICAL SUMMARY OF SHIPBUILDING UNDER THE U.S. MARITIME COMMISSION DURING WORLD WAR II, Table B-1 (Historical Reports of War Administration; U.S. Maritime Commission No. 2, 1949) [hereinafter cited as STATISTICAL SUMMARY]; I THE SHIPBUILDING BUSINESS IN THE UNITED STATES OF AMERICA 103-05 (F.G. Fassett, Jr., ed. 1948).

²⁰SHIPS FOR VICTORY, *supra* note 15, at 3.

²¹*Id.*

²²*Connolly Statement*, *supra* note 18, at 343.

²³See, e.g., U.S. Maritime Commission Specifications for the Construction of A Single Screw

Cargo Vessel, Design EC2-S-C1 at 75-1 to 75-2. *See also infra* text accompanying notes 53-59.

²⁴*See, e.g.*, NAVY DEPARTMENT, BUREAU OF SHIPS, BUREAU OF SHIPS MANUAL, CHAPTER 39: THERMAL INSULATION, *passim* (April 1, 1947).

²⁵In a December 14, 1943 Memorandum for the Secretary of the Navy from Phillip Lemler (by direction of the Chief of the Bureau of Ships) advocating Government financing of an asbestos insulation manufacturer's plant, the Navy stated that "[amosite blankets and pipecovering] material is used for turbine and flange insulation and packing, and is the only flexible material which has proven satisfactory under high temperatures." *Id.* at 2.

²⁶Letter from Chief of Naval Material (W.P. Fetzner, by direction), to Chairman of the Munitions Board, Attn: Mr. W.C. Anderson (November 10, 1952)(discussing current Navy consumption of amosite asbestos). Approximately one pound of amosite fiber is required per board foot of felt. *Id.*

²⁷*Id.*

²⁸*See, e.g.*, Navy Department Specification 32C14h, Cement, Insulation, High-Temperature para. C-1b at 1, and para. H-2, at 6 (April 1, 1946).

²⁹*See supra* note 5 and accompanying text.

³⁰*See, e.g.*, BUREAU OF SHIPS, NAVY DEPARTMENT, ADMINISTRATIVE ORDER NO. 46-53, SUBJ: PURCHASE SPECIFICATIONS—PROCEDURE FOR PROCESSING WITHIN THE BUREAU OF SHIPS (August 7, 1946) ("specifications, including revisions and amendments to existing specifications, are initiated by Bureau of Ships technical sections").

³¹*See, e.g.*, Navy Department Specification 32C14h, *supra* note 28, at Section F, paras. 2-5.

³²*See* NAVY DEPARTMENT, BUREAU OF SHIPS, *supra* note 24, at §§ 39-53 through -56; 39-71 through -72.

³³*Connolly Statement, supra* note 18, at 344-45, 342 (emphasis in statement submitted prior to hearing).

³⁴Executive Order No. 9024, 3 C.F.R. 1079, 1079 (1938-1943 Comp.). Executive Order 9024 provided, *inter alia*, that:

The Chairman of the War Production Board, with the advice and assistance of the members of the Board, shall:

- a. Exercise general direction over the war procurement and production program.
- b. Determine the policies, plans, procedures, and methods of the several Federal departments, establishments, and agencies in respect to war procurement and production, including purchasing, contracting, specifications, and construction; and including conversion, requisitioning, plant expansion, and the financing thereof; and issue such directives in respect thereto as he may deem necessary or appropriate.

³⁵*Id. See also Connolly Statement, supra* note 18, at 341.

³⁶*Connolly Statement, supra* note 18, at 342.

³⁷Strategic and Critical Materials Stock Piling Act, Pub. L. No. 76-117, 53 Stat. 811 (codified as amended at 50 U.S.C. §§ 98 through 98h-4 (1985); *Connolly Statement, supra* note 18, at 343.

³⁸*Connolly Statement, supra* note 18, at 343.

³⁹President Roosevelt created the Office of Production Management on January 7, 1941 to, *inter alia*, "[d]etermine when, to what extent, and in what manner priorities shall be accorded to deliveries of material [for the national defense]." Exec. Order No. 8629, 3 C.F.R. 852, 852 (1938-1943 Comp.).

⁴⁰SHIPS FOR VICTORY, *supra* note 15, at 178 (War Production Board, as successor to Office of Production Management, was in general charge of industrial mobilization).

⁴¹Priorities Regulation No. 1, 32 C.F.R. §944.4 (1943 Cum. Supp.).

⁴²*Id.* at § 944.2; *Connolly Statement, supra* note 18, at 342.

⁴³Priorities Regulation No. 1, *supra* note 41, at § 944.2.

⁴⁴*Id.* at § 944.5; *Connolly Statement, supra* note 18, at 342.

⁴⁵SHIPS FOR VICTORY, *supra* note 15, at 353-59.

⁴⁶*Connolly Statement, supra* note 18, at 342.

⁴⁷*Id.*

⁴⁸*Id.*

⁴⁹*Id.*

⁵⁰The purposes and objectives of this Division [Cork, Asbestos & Fibrous Glass] are to plan, direct, and coordinate the policies and programs of War Production Board to provide and maintain an adequate supply of cork,

asbestos and fibrous glass to fill national defense and civilian needs. Such programs are designed to provide for adequate and maximum production, necessary conservation and effective distribution and utilization of [these] products. These functions are executed through gathering fundamental data from industry and Government sources on foreign conditions, transportation problems, stockpiles, production facilities and essential requirements both for war and civilian use.

Cork, Asbestos & Fibrous Glass Division, War Production Board, Budget Estimate for Fiscal Year 1944, at 2. *See also Connolly Statement, supra* note 18, at 343.

⁵¹*Connolly Statement, supra* note 18, at 343. The Requirements Committee consisted of WPB members and representatives of agencies such as the Navy and the Maritime Commission, which were authorized to present demands for critical materials. *Id.*

⁵²*See, e.g.,* Decision No. 1 (May 18, 1943), in which the Cork, Asbestos & Fibrous Glass Requirements Committee ("CAFGR") recommended that the Board of Economic Warfare be allotted certain amounts of asbestos building sheets/shingles, laminated paper, pipe-covering and block, and molded brake lining for the third quarter of 1943; Decision No. 5 (July 15, 1943) and Decision No. 11 (February 1, 1944), in which the CAFGR recommended allocation of all available asbestos textiles among various end uses necessary for the war effort in 1943 and 1944 respectively; Decision No. 17 (September 28, 1944) and Decision No. 21 (June 14, 1945), in which the CAFGR recommended allocation of asbestos textiles by intermediate or end use for 1945; Decision No. 18 (October 30, 1944) and Decision No. 23 (July 17, 1945), in which the CAFGR recommended allotment of asbestos building materials, asbestos metallic yarn and friction materials, and asbestos packings and gaskets to the Wholesale and Retail Trade Division for allocation among distributors serving essential war industries.

⁵³Supply and Requirements Decision No. 11, *supra* note 52.

⁵⁴*Id.* at 5.

⁵⁵*Id.*

⁵⁶*Id.* at 16, 20 (Table 5).

⁵⁷*Id.* at 5.

⁵⁸*Id.*

⁵⁹*Id.* at 6; Memorandum from W.T. Meloy, Director of Cork, Asbestos & Fibrous Glass Division, to Dr. W.Y. Elliott, Director of Division of Stockpiling and Transportation at 7 (August 5, 1943).

⁶⁰Division of Information, War Production Board, Priorities and Industry, at 7 (August 1942). The WPB also issued "L Orders" to curtail the production of various consumer goods which contained scarce materials, such as asbestos, and which were not vitally essential to the war effort. *Id.* at 9. For example, Order L-41 prohibited the start of unauthorized construction projects which used materials and equipment needed in the war effort. *Id.* Authorization was required for residential construction with an estimated cost of \$500 or more; for agricultural construction of \$1000 or more; and for other construction, including commercial, industrial, recreational, institutional, highway, roadway, subsurface, and utilities, whether publicly owned or privately financed, of \$5,000 or more. *Id.*

⁶¹Conservation Order M-79 Curtailing the Use of Certain Types of Asbestos, 7 Fed. Reg. 436 (1942). *See also Connolly Statement, supra* note 18, at 343-44.

⁶²Conservation Order M-79, *supra* note 61, at §1064.1(a)(1), 7 Fed. Reg. 436.

⁶³*Id.* at § 1064.1(a)(2), 7 Fed. Reg. 436. *See also* Supply and Requirements Decision No. 11 at 23. Conservation Order M-79 required all persons manufacturing or processing asbestos fiber to file monthly reports with the Office of Production Management. Conservation Order M-79, *supra* note 61, at § 1064.1(b), 7 Fed. Reg. 436. In these monthly reports, company officials reported their production levels for specified products, the amount of asbestos fiber used, shipments, purchases, inventories and stocks. *See* sample form PD-252 (12-14-42) (found in National Archives files on the WPB). Any person who willfully violated any provision of the Order could be prohibited from receiving deliveries of any materials subject to allocation, or be criminally prosecuted. Conservation Order M-79, *supra* note 61, at §1064.1(e)(5), 7 Fed. Reg. 436.

⁶⁴1950 MATERIALS SURVEY: ASBESTOS, *supra* note 8, at XVIII-2; *Connolly Statement, supra* note 18, at 344.

⁶⁵Conservation Order M-123, § 1172.1(a), 7 Fed. Reg. 2472 (1942). The sole exception to this policy was the manufacture of industrial packings. *Id.*

⁶⁶*Id.* at § 1172.1(e).

⁶⁷U.S. BUREAU OF MINES, DEPARTMENT OF THE INTERIOR, *supra* note 8, at XVIII-2; *Connolly*

Statement, supra note 18, at 344. *See also* Conservation Order M-123, § 1172.1(a), *as amended*, 7 Fed. Reg. 5119 (1942).

⁶⁸*Connolly Statement, supra* note 18 at 344.

⁶⁹Conservation Order M-283, 8 Fed. Reg. 1790 (1943); *Connolly Statement, supra* note 18, at 344.

⁷⁰Conservation Order M-283, *supra* note 69, at § 1172.3(b), 8 Fed. Reg. 1790.

⁷¹Conservation Order M-283, *supra* note 69, at § 1172.3(d)(2), 8 Fed. Reg. 1790-91; *Connolly Statement, supra* note 18, at 344.

⁷²Plan for Asbestos Procurement to Meet Present Emergency (undated summary of the June 27, 1940 meeting found in National Archives files on the WPB); U.S. BUREAU OF MINES, DEPARTMENT OF THE INTERIOR, *supra* note 8, at XVIII-1.

⁷³*Id.*

⁷⁴*See* W.T. Meloy, *supra* note 59, *passim*. In that memorandum, Meloy outlines stockpile recommendations made on October 25, 1940; August 20, 1941; June 30, 1942; September 18, 1942; October 8, 1942; December 12, 1942; and August 1, 1943.

⁷⁵WAR PRODUCTION BOARD, STATISTICS DIVISION, MATERIALS BRANCH, SUPPLY AND DISTRIBUTION SECTION, SPECIAL REPORT ON PROGRESS OF THE STOCKPILE PROGRAM (August 27, 1942).

⁷⁶General Imports Order M-63, 6 Fed. Reg. 6796 (1941).

⁷⁷General Imports Order M-63, *as amended*, 7 Fed. Reg. 223 (1942).

⁷⁸General Imports Order M-63, *supra* note 76, at § 1042.1(b), 6 Fed. Reg. 6796. *See also*, CIVILIAN PRODUCTION ADMINISTRATION, IMPORT POLICIES AND PROGRAMS OF THE WAR PRODUCTION BOARD AND PREDECESSOR AGENCIES, May 1940 to November 1945, at 50-51 (Historical Reports on War Administration: War Production Board, Special Study No. 30) (May 1, 1947) [hereinafter cited as IMPORT POLICIES AND PROGRAMS]. *See* Letter from Fred W. Gardner, Chief of Cork-Asbestos Branch to asbestos textile manufacturers (September 8, 1942) (stating that the Government, through the Metals Reserve Company, had taken over from industry the purchase of all asbestos fibers from Cape Asbestos Limited and Turner-Newall and their subsidiaries for the year 1943).

⁷⁹IMPORT POLICIES AND PROGRAMS, *supra* note 78, at 51.

⁸⁰*Id.* General Imports Order M-63 also required the filing of certain reports. Every person, other than the Government and its agents, who had any outstanding order, contract, or other arrangement for the importation of any M-63 material, was required to report any requested information to the Metals Reserve Company. *Id.*

⁸¹*Id.* at 52.

⁸²Memorandum of Understanding (January 6, 1943) (executed by Wm. Stix Wasserman on behalf of the Board of Economic Warfare, Metals Reserve Company, United States, and by Oliver S. Franks, on behalf of the Ministry of Supply, United Kingdom).

⁸³*Id. passim. See also* Combined Raw Materials Board, Staff Report No. 1: Asbestos, at 1 (Document No. 180, June 26, 1943).

⁸⁴Presidential Proclamation No. 2413, 3 C.F.R. 164 (1938-1943 Comp.) *See also* Advisory Commission to the Council of National Defense, Bureau of Research and Statistics, Asbestos, at 2 (December 1940).

⁸⁵Staff Report No. 1: Asbestos, *supra* note 83, at 2.

⁸⁶General Imports Order M-63, *as amended*, 10 Fed. Reg. 1365 (1945); 10 Fed. Reg. 11,793 (1945) (amending 32 C.F.R. § 801.1).

⁸⁷WAR PRODUCTION BOARD, HISTORICAL REPORTS ON WAR ADMINISTRATION, POLICIES GOVERNING PRIVATE FINANCING OF EMERGENCY FACILITIES, May 1940 to June 1942 (September 20, 1944; reissued March 15, 1946 (discussing plants and facilities the construction or acquisition of which the Government financed).

⁸⁸Post-War Government Control of Plants and Facilities Financed by the Government, at 1 (January 19, 1943) (unsigned memorandum in National Archives files on WPB).

⁸⁹*Id.* at 2-4.

⁹⁰*Id.* at 6.

⁹¹*See* Second Revenue Act of 1940, Ch. 757 § 302, 54 Stat. 974 (codified, *as amended*, at 26 U.S.C. § 124) (omitted from 1954 Internal Revenue Code). The tax amortization provision of the Act encouraged industry to use its capital to build war facilities and, at the same time, protected industry against bankruptcy by allowing a five-year (rather than the traditional 20-year) tax write-off of the facilities' cost. R.A. PATTERSON, UNDER SECRETARY OF WAR, A REPORT TO THE

SECRETARY OF WAR ON THE ADMINISTRATION OF SECTION 124 OF THE INTERNAL REVENUE LAW RELATING TO THE ISSUE OF NECESSITY CERTIFICATES, Introduction at 1 [hereinafter cited as PATTERSON REPORT], reprinted in OFFICE OF THE CHAIRMAN, PROCUREMENT POLICY DIV., WAR PRODUCTION BOARD, HISTORY OF PROCUREMENT POLICIES OF THE WAR PRODUCTION BOARD AND PREDECESSOR AGENCIES 1940-1945, at App. A (December 29, 1945) [hereinafter cited as HISTORY OF PROCUREMENT POLICIES].

⁹²PATTERSON REPORT, *supra* note 91, at 4. See also HISTORY OF PROCUREMENT POLICIES, *supra* note 91, at 43-44; Executive Order 9406, 3 C.F.R. 287 (1943-1948 Comp.).

⁹³PATTERSON REPORT, *supra* note 91, at Introduction.

⁹⁴See *infra* note 96, at 1; SHIPS FOR VICTORY, *supra* note 15, at 451-455.

⁹⁵Joint Labor-Management Committee, Labor Production Division, War Production Board, War Production Drive—General Suggestions on Scope, Structure, and Procedures (undated document found in National Archives files on WPB).

⁹⁶War Production Board, Functions and Objectives of Joint Labor-Management Production Committees at 2-3 (circa December, 1942) (unsigned memorandum in U.S. National Archives files on WPB).

⁹⁷Labor-management committees conferred the Award of Individual Production Merit, Production Drive Headquarters awarded the Certificate of Individual Production Merit, and the Chairman of the War Production Board awarded the Citation for Individual Production Merit. *Id.* at 5.

⁹⁸Memorandum from W.T. Meloy, Director, Cork, Asbestos & Fibrous Glass Division, to John J. Hall, Deputy Vice Chairman for Industry Operations, at 1 (November 4, 1943) (discussing essential plants and manpower).

⁹⁹*Id.* at 2. Meloy also stated that “Asbestos Textiles are generally in demand for military and essential civilian use and are governed by strict allocation under [Conservation] Order M-283. They are used in the manufacture of Navy cable materials, mechanical packings and gaskets, friction materials, safety clothing, aircraft, etc.” *Id.* at 3.

¹⁰⁰*Id.* at 6.

¹⁰¹The Government owned or held a significant financial interest in most of the “private” shipyards. SHIPS FOR VICTORY, *supra* note 15, at 108 (“[Maritime] Commission decided to finance the emergency yards as if they were arsenals.”).

¹⁰²STATISTICAL SUMMARY, *supra* note 19, at 93, 101 (Table E-7).

¹⁰³2 UNITED STATES NAVY, BUREAU OF SHIPS, HISTORICAL SECTION, ADMINISTRATIVE HISTORY OF THE BUREAU OF SHIPS DURING WORLD WAR II, 184-86, (1948).

¹⁰⁴See, e.g., Contract No. MCC-30813 between the United States Maritime Commission and Bethlehem-Fairfield Shipyard, Inc. Article 13 (August 10, 1944).

¹⁰⁵*Id.* at Article 24. The contract between the private shipyard and the Maritime Commission also required the shipyard to secure insurance. *Id.* at Article 28. The Maritime Commission controlled the content, nature and terms of the insurance policies, and the selection of the insurance companies issuing the policies. *Id.*

¹⁰⁶*Id.* at Article 12.

¹⁰⁷SHIPS FOR VICTORY, *supra* note 15, at 134-35.

¹⁰⁸SHIPS FOR VICTORY, *supra* note 15, at 244, 667.

¹⁰⁹A shipyard could not hire employees unless it had the approval of the U.S. Employment Service. In addition, the War Manpower Commission controlled the movement of the labor force by implementing employment ceilings and establishing priorities. *Id.* at 663-67.

¹¹⁰In 1942, the Maritime Commission published “Basic Principles To Be Observed in Establishing Production Training Programs In Shipyards.” Thereafter, the Commission audited wages and allowed only those personnel who had advanced after receiving the appropriate training to receive higher wages. *Id.* at 263-64, 676-77.

¹¹¹*Id.* at 268-70.

¹¹²The Shipbuilding Stabilization Committee decided issues relating to shipyard wages, structured the schedule for, and agenda of, collective bargaining sessions and otherwise coordinated all phases of shipbuilding labor relations. *Id.* at 273-75, 279-80.

¹¹³To limit the cost of building ships and to eliminate wage differentials between yards, the Government held geographical zone conferences to set regional wages it was willing to pay on its shipbuilding contracts. *Id.* at 272-75, 278-80, 286.

¹¹⁴*Id.* at 658-61.

¹¹⁵*Id.* at 464-65; 493-94.

¹¹⁶*Id.* at 482-83.

¹¹⁷*Id.* at 486.

¹¹⁸*Id.* at 446-49.

¹¹⁹*E.g.*, Division of Shipyard Labor Relations, U.S. Maritime Commission, Shipyard Health and Safety Bulletin No. 6 (April 9, 1943) (re health hazards of chlorinated hydrocarbons).

¹²⁰SHIPS FOR VICTORY, *supra*, note 15, at 446.

¹²¹U.S. NAVY AND U.S. MARITIME COMMISSION, MINIMUM REQUIREMENTS FOR SAFETY AND INDUSTRIAL HEALTH IN CONTRACT SHIPYARDS (1943) [hereinafter cited as MINIMUM REQUIREMENTS].

¹²²*Id.* at x; SHIPS FOR VICTORY, *supra* note 15, at 447. *See infra* notes 141, 144-156 and accompanying text.

¹²³SHIPS FOR VICTORY, *supra* note 15, at 446, 449.

¹²⁴*Id.* at 449. *See, e.g.*, Industrial Health Survey of the Bath Iron Works, Bath, Maine, at 1 (April 9, 10, 1943).

¹²⁵ANNUAL REPORT OF THE SURGEON GENERAL, U.S. NAVY, CHIEF OF THE BUREAU OF MEDICINE AND SURGERY, TO THE SECRETARY OF THE NAVY CONCERNING STATISTICS OF DISEASES AND INJURIES IN THE UNITED STATES NAVY FOR THE CALENDAR YEAR 1939, at 24-25 (1941).

¹²⁶*Id.* at 24.

¹²⁷*Id.*

¹²⁸Memorandum from C.S. Stephenson, Commander in Charge of the U.S. Navy's Division of Preventative Medicine, to Admiral R. McIntire, Surgeon General of the Navy, at 2 (March 11, 1941) (emphasis added).

¹²⁹*Compensation For Occupational Diseases: Hearings on H.R. 1626 and H.R. 3090 Before the Subcomm. on Labor Standards of the House Comm. on Education and Labor, 99th Cong., 1st Sess. 345 (1985) (statement of James F. Morgan, former industrial hygienist for the Navy during World War II) [hereinafter cited as Morgan Testimony].*

¹³⁰*Id.*

¹³¹*Id.* Mr. Morgan further testified that course participants were made familiar with published reports of studies performed in Great Britain, South Africa and the United States during the late 1920's and 1930's that established the cause and effect relationship between uncontrolled, excessive exposure to asbestos and the onset of disease, and highlighted the need to implement protective measures. *Id.* These reports included the results of studies conducted by the British researchers Merewether and Lewis, by Anthony Lanza, a Metropolitan Life Insurance Company researcher whose study report was published by the United States Public Health Service, and a study of asbestos textile workers performed by Dr. Waldemar Dreessen and published by the Public Health Service. *Id.* at 355.

¹³²*Id.* at 348. *See* Address by Dr. Philip Drinker to the United States Maritime Commission (October 20, 1942). *See generally* STENOGRAPHER'S MINUTES OF MEETING IN REGARD TO MINIMUM REQUIREMENTS FOR INDUSTRIAL HEALTH AND SAFETY IN SHIPYARDS (December 7-8, 1942) [hereinafter cited as MINIMUM REQUIREMENTS MINUTES].

¹³³*See* MINIMUM REQUIREMENTS MINUTES, *supra* note 132, at 22.

¹³⁴Industrial Health Survey of South Portland Ship Corp. and the Todd-Bath Iron Works, South Portland, Maine, at 11-12 (September 18-22, 1942).

¹³⁵Industrial Health Survey of the Oregon Shipbuilding Corporation, Portland, Oregon, at 18-20 (September 3-4, 1942). The report also stated that the workers were totally ignorant of the hazards of asbestos exposure and were uneducated about safe methods of handling asbestos. Indeed, the report suggested that the ventilation system be put under lock and key to prevent workers from turning it off. *Id.*

¹³⁶Industrial Health Survey of the Bath Iron Works Corporation, Bath, Maine, at 12 (September 22, 1942).

¹³⁷*See* MINIMUM REQUIREMENTS MINUTES, *supra* note 132, *passim*.

¹³⁸*Id.*

¹³⁹*Id.* at 22 (emphasis added).

¹⁴⁰MINIMUM REQUIREMENTS, *supra* note 121; *Morgan Testimony, supra* note 129, at 348.

¹⁴¹MINIMUM REQUIREMENTS, *supra* note 121, at x; *Morgan Testimony, supra* note 129, at 346.

¹⁴²MINIMUM REQUIREMENTS, *supra* note 121, at 6, 9.

¹⁴³*Id.* at 5, 10-11, 13.

¹⁴⁴*Morgan Testimony, supra* note 129, at 346.

¹⁴⁵*See infra* notes 146-156, and accompanying text. The Government also acknowledged the danger of asbestosis in a report advocating the creation of an Industrial Health and Safety Service

of the Labor Production Division of the WPB. "Noxious fumes and industrial dusts are occupational hazards in many industries causing *such well-known diseases as silicosis, asbestosis and benzol poisoning*" (emphasis added). J. FEWKES, ORIGIN OF THE PROPOSAL FOR THE INDUSTRIAL HEALTH AND SAFETY SERVICE, at 3-4 (October 26, 1943).

¹⁴⁶Industrial Health Survey and Safety Survey of Willamette Iron & Steel Corporation, Portland, Oregon, at 32 (September 11-18, 1943).

¹⁴⁷Industrial Health and Safety Re-Survey of Willamette Iron & Steel Corporation, Portland, Oregon, at 6-7 (March 13, 15, 22, 23, 1945).

¹⁴⁸Re-Inspection Report, Safety and Industrial Health, Defoe Shipbuilding Co., Bay City, Michigan, at 3 (January 20-21, 1944).

¹⁴⁹*Id.*

¹⁵⁰Industrial Hygiene Survey of Gulf Shipbuilding Corporation, Chickasaw, Alabama, at 10 (March 21-23, 28-29, 1944).

¹⁵¹*Id.*

¹⁵²Industrial Health and Safety Re-Survey of Albina Engine and Machine Works, Inc., Portland, Oregon, at 18 (March 20-26, 1945).

¹⁵³Industrial Health Survey of the Bath Iron Works Corporation, Bath, Maine, at 12 (September 22, 1942).

¹⁵⁴Report on Investigation of Asbestosis from Amosite Pipe Covering at Bath Iron Works, Bath, Maine, at 1 (December 19, 1944).

¹⁵⁵*Id.* at 1-2.

¹⁵⁶Final Report, Bath Iron Works Corporation, Bath, Maine, at 1 (May 5, 1945).

¹⁵⁷Drinker, Fleischer, Viles and Gade, *A Health Survey of Pipe Covering Operations in Constructing Naval Vessels* (Draft), at 1 [hereinafter cited as Draft Fleischer-Drinker Report]. The final report was published in 28 J. IND. HYGIENE & TOX., at 9 (1946).

¹⁵⁸Draft Fleischer-Drinker Report, *supra* note 157, at 1. The Navy yards surveyed were Boston Naval Shipyard and Brooklyn Naval Shipyard. *Id.* Previous x-ray findings from Portsmouth Naval Shipyard were included in the report. *Id.* The private yards surveyed were New York Shipbuilding and Drydock Corp. and Bethlehem Steel Corp.'s Fore River Shipyard. *Id.*

¹⁵⁹*Id.*; Fleischer, Viles, Gade & Drinker, *supra* note 157, 28 J. IND. HYGIENE & TOX., at 9.

¹⁶⁰The one worker with advanced asbestosis at New York Shipbuilding and Drydock Corp. had worked in the asbestos industry for 23 years before going to work in the shipyard. Draft Fleischer-Drinker Report, *supra* note 157, at 22. At the Bethlehem Fore River Shipyard, two pipecoverers with "moderate asbestosis" had worked for 22 and 30 years, respectively, at pipecovering in the yard. *Id.*

¹⁶¹For example, in 1943, the Navy Bureau of Medicine and Surgery ("BUMED"), the Bureau of Ships, and the Camden, N.J. office of the Navy Supervisor of Shipbuilding ("SUPSHIPS") were all directly informed that the use of water-repellent asbestos felt insulation generated unacceptable concentrations of asbestos dust and created a substantial health hazard at Government and private shipyards. In response to persistent complaints by shipyard workers, BUMED, in an internal Navy memorandum, recommended (i) the use of approved respirators, (ii) annual chest x-rays of exposed employees, (iii) atmospheric tests for contamination, and (iv) spraying of sodium silicate on the asbestos felt to reduce dust concentrations. Letter from Acting Chief, BUMED, to Chief, BUSHIPS (August 6, 1943) appended to July 1, 1943 1st Endorsement from Chief, Bureau of Ships, to Chief, BUMED, requesting comment on health hazards of water repellent amosite. *See also* Letter from Chief, Bureau of Ships, to Supervisor of Shipbuilding, U.S.N. Camden, N.J. (August 2, 1943) (discussing protection of workers from health hazards of amosite).

Shortly thereafter, by letter dated January 8, 1944, Dr. Drinker informed the Bureau of Ships that labor officials at New York Shipbuilding & Drydock Corp. were concerned about the hazards attendant with the use of asbestos. He reported that: "Dust counts in the room where the men were working were very much higher than anyone would recommend—they ran up to 25 million p.p.c.f." Letter from Dr. Philip Drinker to Bureau of Ships (January 8, 1944) (discussing labor concerns arising from use of amosite).

¹⁶²Fleischer, Viles, Gade & Drinker, *supra* note 157, 28 J. IND. HYGIENE & TOX., at 16. The authors of the report stated their conclusions as follows:

1. The character of the asbestos pipecovering industry on board naval vessels is such that conclusions drawn from other asbestos industries, such as textiles, cannot be applied.
2. The operations of band saw cutting, grinding, cement mixing and

installation on board ships should be equipped with exhaust ventilation to keep the total dust concentration low.

3. The incidence of asbestosis among pipecoverers in the shipyards studies was low, 0.29 percent, or three cases out of 1,074. In view of the nature of shipboard pipecovering work, this low incidence is not surprising.
4. Since each of the 3 cases of asbestosis had worked at asbestos pipecovering in shipyards for more than twenty years, *it may be concluded that such pipecovering is not a dangerous occupation.*

Id. (emphasis added).

¹⁶³Hueper, *Environmental Lung Cancer*, 20 INDUSTRIAL MEDICINE AND SURGERY 49, 56-58 (1951). See also W. HUEPER, OCCUPATIONAL TUMORS AND ALLIED DISEASES 403 (1942) (appreciable number of asbestosis cases associated with carcinoma of the lung).

Even before the war, the Government had had access to medical literature concerning the relationship between asbestosis and cancer of the lung. In 1935, for example, Kenneth Lynch and W. Altman Smith of the American medical community first observed their correlation of asbestosis and lung cancer. See Lynch & Smith, *Pulmonary Asbestosis III: Carcinoma of Lung in Asbesto-Silicosis*, 24 AMERICAN JOURNAL OF CANCER 56, 56-64 (1935). This finding was confirmed much later by the Chief Inspector of Factories of Great Britain, who reported in 1948 and 1949 that there was a high incidence of lung cancer in necropsies in asbestotic patients. See Editorial, *Asbestosis and Cancer of the Lung*, 140 J.A.M.A. 1219, 1219-20 (1949) (observing that coexistence of asbestosis and lung cancer is not coincidental); Conklin, *Cancer and Environment*, 180 SCIENTIFIC AMERICAN 11, (1949) (listing asbestosis as industrial carcinogen); Doll, *Mortality from Lung Cancer in Asbestos Workers*, 12 BRITISH JOURNAL OF INDUSTRIAL MEDICINE 81, (1955) (noting lung cancer as industrial hazard of asbestos workers).

¹⁶⁴W. HUEPER, A QUEST INTO THE ENVIRONMENTAL CAUSES OF CANCER OF THE LUNG 35-38 (Public Health Monograph No. 36, 1955).

¹⁶⁵BUMED Instruction 6270.3 (November 7, 1955). Dr. Waldemar Dreessen, in a report published by the United States Public Health Service in 1938, had recommended the 5 million p.p.c.f. threshold limit value. W. DREESSEN, J. DALLAVALE, T. EDWARDS, J. MILLER & R. R. SAYERS, A STUDY OF ASBESTOSIS IN THE ASBESTOS TEXTILE INDUSTRY 117 (Public Health Bulletin No. 241, 1938).

¹⁶⁶Naval Civilian Personnel Instructions 88.11, Enclosure 1 (July 5, 1955).

¹⁶⁷Address by O. W. Meeker, entitled "Pipe Insulation Processes and Procedures," at 6, *reprinted in* Minutes of the Pipe and Copper Shop Master Mechanics Conference, Boston Naval Shipyard (May 8-10, 1957).

¹⁶⁸"A Discussion of Mr. O. W. Meeker's Talk" at 3-4, *reprinted in* Minutes of the Pipe and Copper Shop Master Mechanics Conference, *supra* note 167.

¹⁶⁹Robbins & Marr, *Asbestosis*, 19 SAFETY REVIEW No. 10, at 10 (October 1962).

¹⁷⁰Marr, *Asbestos Exposure During Naval Vessel Overhaul*, 25 INDUSTRIAL HYGIENE JOURNAL 264 (May-June, 1964).

¹⁷¹*Biological Effects of Asbestos*, 132 ANN. N.Y. ACAD. SC. I (1965).

¹⁷²Selikoff, Churg & Hammond, *The Occurrence of Asbestosis Among Insulation Workers in the United States*, 132 ANN. N.Y. ACAD. SC. 139, 152 (1965).

¹⁷³*Biological Effects of Asbestos*, *supra* note 171, at 1.

¹⁷⁴Selikoff, Churg & Hammond, *supra* note 172, at 152. In June 1963, Dr. Selikoff had delivered a paper which suggested that mesothelioma was a frequent complication of asbestosis. Selikoff, Churg & Hammond, *Asbestos Exposure and Neoplasia*, 188 J.A.M.A. 22, 22-26 (1964).

¹⁷⁵X-57 Asbestos Shop—Dust Counts (Enclosure to April 15, 1965 Norfolk Naval Shipyard Memorandum).

¹⁷⁶Norfolk Naval Shipyard Memorandum from S. Levinson, code 725, Industrial Hygiene Division, to Code 940, Group Master, Outfitting (June 18, 1965) (discussing dust counts during shipboard asbestos work).

¹⁷⁷Norfolk Naval Shipyard Memorandum from G. Hutchinson to Shop 56 (July 12, 1967) (discussing dust findings and potential exposures).

¹⁷⁸Norfolk Naval Shipyard Memorandum from G. Ulshafer (Code 700) to Code 300 (July 12, 1968) (discussing mandatory use of respirators in asbestos and amosite work) (emphasis added).

¹⁷⁹C. Mangold, R. Beckett & D. Bessmer, *Asbestos Exposure and Pulmonary x-ray Changes to Pipecoverers and Insulators At Puget Sound Naval Shipyard 1* (August 1968) (Medical Department, Puget Sound Naval Shipyard).

¹⁸⁰*Id.* at 4.

¹⁸¹*U.S. Warned of Asbestos Peril*, *The Washington Post*, Dec. 4, 1968, at A 4, col. 1.

¹⁸²*Selikoff Statement*, *supra* note 13, at 351.

¹⁸³Memorandum from SEC 6100 prepared by Capt. W. R. Riblett U.S. Navy, to Ships 07 (December 9, 1968).

¹⁸⁴*See, e.g.*, Letter from Officer in Charge, Naval Ship Engineering Center, Philadelphia Division, via Supervisor of Shipbuilding, Conversion and Repair, USN Pascagoula, to Ingalls Shipbuilding Corp. (April 30, 1969).

¹⁸⁵*See, e.g.*, Letter from J. W. Murdock, Head, Applied Physics Department, Naval Ship Engineering Center, Philadelphia Division, Navy Department, to Owens-Corning Fiber Glass Corp. (May 5, 1969)(regarding proposed insulating materials for naval vessels).

¹⁸⁶Letter from Admiral Rickover to Commander, Naval Ship Systems Command (September 22, 1970).

¹⁸⁷Letter from the Acting Comptroller General of the United States to the Hon. Glenn A. Anderson (October 18, 1979).

¹⁸⁸*Id.* at 5.

¹⁸⁹Asbestos was among the first substances OSHA regulated after the Agency was established within the Department of Labor in April 1971. *See* Memorandum from R. D. Zumwalde, NIOSH (May 3, 1982) (regarding Industrial Hygiene—Asbestos Past and Present). The initial promulgation of OSHA standards published on May 29, 1971 included a standard for occupational exposure to asbestos. *Id.* at 2. The standard established a permissible exposure limit of 12 fibers, greater than 5 microns in length, per cubic centimeter of air. *Id.* The permissible exposure limit has been lowered twice, first to 5 fibers per cubic centimeter of air on July 1, 1972, then to 2 fibers per cubic centimeter on July 1, 1976, which is the current standard. *Id.* at 2-3. *See also* 29 C.F.R. 1910.1001.

¹⁹⁰*See e.g.*, Pearl Harbor Naval Shipyard Memorandum from Code 106.3 to code 106 (March 13, 1981) (documenting ripout operations on board U.S.S. Davidson); Pearl Harbor Naval Shipyard OSHA Critique Report (January 21, 1983). The reports from Code 106 (the Shipyard's Occupational Safety and Health Office) clearly indicate that, despite past corrective actions by the Navy, in 1983, literally thousands of civilian shipyard workers and Navy ships' forces were being exposed daily to asbestos far in excess of the acceptable levels. The reasons for such exposure include the Navy's recurrent failure to train affected personnel; its lack of enforcement of its own safety, health and asbestos control program; its failure to maintain and provide personnel with the prescribed personal protective gear; its failure to educate affected personnel on the health hazards of asbestos; and its failure to abate the frequent and sometimes deliberate violation of Navy procedures for handling asbestos by command personnel, shipyard workers, ship's force, and contractor personnel.

The Occupational Safety and Health Administration ("OSHA") publicly disclosed — before the Subcommittee on Manpower and Housing of the House Committee on Government Operations — the Navy's failure to enforce the safety and health programs established to benefit Navy personnel. *See Oversight of the Navy Department's Enforcement of OSHA: A Hearing Before a Subcomm. of the House Comm. on Government Operations*, 98th Cong., 1st Sess. 25-75 (1983) (testimony of Donald Mackenzie, Regional Administrator, OSHA).

¹⁹¹D. HENSLER, W. FELSTINER, M. SELVIN AND P. EBENER, *ASBESTOS IN THE COURTS* 20. (Rand Corporation, Institute For Civil Justice, No. R-3324-ICJ, 1985) [hereinafter cited as *ASBESTOS IN THE COURTS*].

¹⁹²*Id.*

¹⁹³The exclusive liability section of the Federal Employees' Compensation Act ("FECA"), 5 U.S.C. § 8116(c) provides:

The liability of the United States or an instrumentality thereof under this subchapter or any extension thereof with respect to the injury or death of an employee is exclusive and instead of all other liability of the United States or the instrumentality to the employee, his legal representative, spouse, dependents, next of kin, and any other person otherwise entitled to recover damages from the United States or the instrumentality because of the injury or death in a direct judicial proceeding, in a civil action, or in admiralty, or by an administrative or judicial proceeding under a workmen's compensation statute or under a Federal tort liability statute.

¹⁹⁴*Jackson v. Johns-Manville Sales Corp.*, 750 F.2d 1314, 1330 (5th Cir. 1985) (Clark, Gee,

Garza, Politz & Jolly, J.J., dissenting).

¹⁹⁵ASBESTOS IN THE COURTS, *supra* note 191, at 32.

¹⁹⁶As the number of claims against the manufacturers increased, five manufacturers—the Manville Corporation, Fibreboard Corporation, GAF Corporation, Nicolet, Inc. and Armstrong World Industries, Inc.—sued more than 65 insurance companies, claiming that the manufacturers were wrongfully denied coverage for asbestos claims. *See In re Asbestos Insurance Coverage Cases*, Judicial Council Coordination Proceeding No. 1072 (San Francisco Superior Court filed 1981). Manville recently settled with its insurers for \$500 million. *Asbestos Litig. Rep. (Andrews)* 12,245-46 (May 2, 1986). Manville's modified reorganization plan calls for \$615 million in insurance proceeds. *Id.* The trial of the coverage case began in March, 1985 in San Francisco Superior Court, involves 150 lawyers and is expected to last eighteen months. *Asbestos Litig. Rep. (Andrews)* 6726-30 (June 10, 1983), 9468-69 (January 4, 1985).

Other manufacturers have already litigated and resolved insurance coverage issue. *See, e.g., Keene Corp. v. Insurance Co. of No. America*, 667 F.2d 1034 (D.C. Cir. 1981), *cert. denied*, 455 U.S. 1007 (1982). The controversy between manufacturers and insurers and among the insurers arises out of the language of the insurance policies and the latent nature of asbestos-related diseases. Typically, claimants name numerous manufacturers as defendants in lawsuits brought for disabilities that resulted from exposure to asbestos over a number of years. Because asbestos-related diseases have a long latency period, no discrete time of "injury" is identifiable. Special Project, *An Analysis of the Legal, Social and Political Issues Raised by Asbestos Litigation*, 36 VAND. L. REV. 573, 712 (1983) [hereinafter cited as *Special Project*]. In addition, a manufacturer's insurance companies change over time. With the enormous sums of money at issue, the parties have asked the courts to interpret insurance policies, and if necessary, to determine and apportion liability.

¹⁹⁷ASBESTOS IN THE COURTS, *supra* note 191, at 1. The manufacturers and their insurers paid plaintiffs and their attorneys approximately \$400 million between 1970 and 1982 in trial awards, settlements, and punitive damages alone. *Jackson v. Johns-Manville Sales Corp.*, 750 F.2d 1314, 1338 (app.) (5th Cir. 1985). The manufacturers' legal fees and litigation expenses are not included in this figure. *Id.*

¹⁹⁸*Asbestos Litig. Rep. (Andrews)* 5663-71 (Oct. 8, 1982).

¹⁹⁹*Jackson v. Johns-Manville Sales Corp.*, 750 F.2d 1314, 1339 (app.) (5th Cir. 1985).

²⁰⁰ASBESTOS IN THE COURTS, *supra* note 191, at 22. To date, the manufacturers that have filed for reorganization are UNR Industries, Inc. (July 1982), Johns-Manville Corporation (August 1982), Amatex Corporation (October, 1982) and Forty-Eight Insulations, Inc. (March, 1985). *Id.*

²⁰¹*Asbestos Litig. Rep. (Andrews)* 10, 303 (July 5, 1985).

²⁰²Brochure, *The Asbestos Claims Facility*, reprinted in *Asbestos Litig. Rep. (Andrews)* 10,576; 10,577 (August 16, 1985) [hereinafter cited as *Wellington Brochure*].

²⁰³*Id.* at 10, 578; *Agreement Concerning Asbestos-Related Claims*, reprinted in *Asbestos Litig. Rep.*, *supra* note 201, at 10,351 [hereinafter cited as *Wellington Agreement*].

²⁰⁴*Wellington Brochure*, *supra* note 202, at 10, 580.

²⁰⁵*Id.* at 10,578; *Wellington Agreement*, *supra* note 203 at 10, 352.

²⁰⁶*Asbestos Litig. Rep. (Andrews)* 12,049 (April 4, 1986). Over 1,600 claims were handled by the facility in the first seven months of operation. *Id.*

²⁰⁷*Asbestos Litig. Rep.*, *supra* note 201, at 10,304.

²⁰⁸Letter from William J. Anderson, Director, United States General Accounting Office to the Hon. Daniel K. Inouye, United States Senate and the Hon. Austin J. Murphy, Chairman, Subcommittee on Labor Standards of the House Committee on Education and Labor (September 19, 1985) at 2 [hereinafter cited as *GAO Report*].

²⁰⁹Although government employees are barred from bringing suit against the Government for asbestos-related injuries, the Supreme Court has held that the FECA exclusivity provision does not bar claims for indemnity against the United States for damages incurred by third parties (i.e., the manufacturers) as a result of the injury or death of a government employee. *Lockheed Aircraft Corp. v. United States*, 460 U.S. 190 (1983).

²¹⁰GAO Report, *supra* note 208, at 2. In addition, the United States paid \$5.75 million in 1978 as its portion of a \$20 million settlement with asbestos workers from Tyler, Texas. *Yandle v. PPG Industries, Inc.*, No. TY74-3-CA, *Stipulation For Compromise Settlement* (E.D. Tex. 1978) [hereinafter cited as *Tyler I Settlement*]. The Tyler I settlement is the only asbestos-related case in which the United States compensated asbestos victims. *See Compensation for Occupational Diseases: Hearings on H.R. 1626 and H.R. 3090 Before the Subcomm. on Labor Standards of the*

House Comm. on Education and Labor, 99th Cong., 1st Sess. 301 (1985) (Statement of Robert Willmore, Deputy Assistant Attorney General) [hereinafter cited as *Willmore Statement*]. See also, *id.* at 323 (letter from Robert L. Willmore to Hon. Austin J. Murphy, M.C., enclosing answers to written follow-up questions regarding his testimony) [hereinafter cited as *Willmore Letter*]. The Department of Justice reports that of the approximately \$6 billion in claims that have been filed against the United States in the asbestos litigation, 1.4 percent (\$86,541,000) involve claims by individuals seeking damages from the United States. The remaining 98.6 percent involve claims by the manufacturers seeking indemnification or contribution from the United States. *Id.*

²¹¹GAO Report, *supra* note 208, at 8-9. See also *Willmore Letter*, *supra* note 210, at 2-3.

²¹²Statement of Edwin Meese III, U.S. Attorney General, Before the House Comm. on the Judiciary, at 7-8 (March 12, 1986) (statement submitted prior to hearing).

²¹³Justice Management Division, U.S. Department of Justice, Congressional Authorization and Budget Estimates Fiscal Year 1987, at 112.

²¹⁴*Willmore Statement*, *supra* note 210, at 298. The total, which may run as high as \$370-400 million annually, includes benefits paid through Social Security, veterans' pensions, food stamps, Aid to Families with Dependent Children, Medicaid, etc. *Willmore Letter*, *supra* note 210, at 333-35.

²¹⁵*Jackson v. Johns-Manville Sales Corp.*, 750 F.2d 1314, 1330 (5th Cir. 1985) (Clark, Gee, Garza, Politz & Jolly, J.J., dissenting) (footnote omitted).

²¹⁶ASBESTOS IN THE COURTS, *supra* note 191, at xxvi, 24. As latent asbestos claims resulting from uncontrolled excessive exposures in World War II shipyards develop over time, the likelihood increases that injured workers will seek redress in court. *Jackson v. Johns-Manville Sales Corp.*, 750 F.2d 1314, 1338 (app.) (5th Cir. 1985). Between 1967 and 1968, only three percent of asbestos-related deaths resulted in litigation; by 1975, the number had risen to thirty-two percent. *Id.* In predicting the number of future lawsuits, experts assume that by 1992, all asbestos-related deaths will result in litigation. *Id.*

²¹⁷ASBESTOS IN THE COURTS, *supra* note 191, at 18.

²¹⁸*Id.* at 20. The plaintiffs' preference for the tort system, the Rand study found, stems from three factors: (1) tort awards in comparison to workers' compensation awards, are, in most cases, higher, and may compensate claimants for pain and suffering, loss of consortium and cancerphobia, which the workers' compensation system does not recognize; (2) tort damages are coordinated with workers' compensation awards, allowing employers to recover compensation benefits paid to a worker who subsequently obtains a tort recovery against a third party defendant; and (3) contingency fees in workers' compensation cases are often severely restricted. *Id.* at 20-21.

²¹⁹*Id.* at 22.

²²⁰*Id.*

²²¹*Id.*

²²²*Id.*

²²³*Id.* at 22-23.

²²⁴*Id.* at xxvi.

²²⁵The Rand study notes that, as a group, asbestos plaintiffs have had little or no prior experience in dealing with attorneys. The asbestos plaintiffs have had little control over their attorneys for two reasons: (i) they lack sophistication and (ii) one attorney often represents many plaintiffs. *Id.* at 15-16.

²²⁶*Id.* at xxvi-xxvii (emphasis added). The Rand study found that, in the asbestos litigation, the transformation from the historical case-by-case approach into a quasi-administrative group approach represented a trade-off between consistency and individualization which came about "without plan, without debate and without much public awareness." *Id.* at 114. Ultimately, the study concludes, "The . . . sudden and unpublicized [change] in the character of litigation seems to fly in the face of the slow, careful, incremental and public way of change that has been characteristic of Anglo-American common law for centuries." *Id.*

²²⁷781 F.2d 394, 415-17 (5th Cir. 1986) (Clark, Gee, Garza, Politz & Jolly, J. J. dissenting), *petition for cert. filed*, 54 U.S.L.W. 3664 (U.S. March 25, 1986) (No. 85-1583).

²²⁸*Id.* at 417 (emphasis added).

²²⁹*Id.* at 415 (footnote omitted).

²³⁰A recent survey indicates that a majority of the American public believe that the federal Government should establish a program to compensate individuals who suffer from asbestos-related disease. *Investor's Daily*, February 11, 1986, at 8, col. 5. The survey, conducted by

American Viewport, Inc., found that 81% of the participants agreed that the Government ought to be subject to liability when it functions like a private company in the purchase and use of a hazardous material. Sixty-one percent approved of congressional efforts to establish a compensation program for asbestos victims, while 65% thought that the restrictions which prevent shipyard asbestos workers from suing for compensation from the Federal Government were unfair. *Id.*

²³¹In 1977, then-Representative Millicent Fenwick introduced the first asbestos disease compensation bill, H.R. 8689, 95th Cong., 1st Sess. (1977). Neither H.R. 8689 nor a subsequent bill sponsored by Representative Fenwick, H.R. 27, 96th Cong., 1st Sess. (1979), received much legislative support. *See Special Project, supra* note 196, 36 VAND. L. REV. at 790. A third Fenwick bill, H.R. 5224, 97th Cong., 1st Sess. (1981), entitled "Asbestos Health Hazards Compensation Act," received some support. The bill would have included as a responsible party any business entity that imported, sold, manufactured or distributed any product or substance that contained asbestos, cigarettes, or cigarette tobacco. 36 VAND. L. REV. at 793. The bill did not provide for government participation in the compensation scheme. *Id.* at 794.

Senator Gary Hart (D-Co.) introduced S. 1643, the Asbestos Health Hazards Compensation Act of 1981, 97th Cong., 1st Sess. (1981), which was similar to Representative Fenwick's proposals. However, the Hart bill would have established minimum standards for state and federal workers' compensation payments for asbestos-related claims and required responsible parties, including the Government, to provide claimants with supplemental payments when the awarded benefits fell below minimum standards. 36 VAND. L. REV. at 794-95. The Hart bill similarly was unsuccessful.

Representative George Miller, (D-Ca.) introduced H.R. 5735, the Occupational Health Hazards Compensation Act of 1982, 97th Cong., 2d Sess. (1982), which would have provided compensation for occupational exposure to uranium ore and asbestos. 36 VAND. L. REV. at 797. The Miller bill would have compensated asbestos-disease victims by requiring the last responsible employers and the asbestos industry to pay benefits indirectly to eligible employees and, alternatively, to contribute to a trust fund created to disburse payments to successful claimants. 36 VAND. L. REV. at 800-801. The Miller bill created no liability on the part of the Government. *Id.* at 800. Although the bill acquired 28 co-sponsors and received considerable legislative action, it was not enacted. *See id.* at 798.

Comprehensive product liability legislation has also been introduced in Congress. In January 1983, Senator Robert Kasten (R-Wi.) introduced S. 44, the Product Liability Act, 98 Cong., 1st Sess. (1983). Reintroduced as S. 100 in 1985, Senator Kasten's bill would have created a federal code of substantive law to govern all product liability cases in state or federal court. Such legislation, if enacted, would have applied to all product liability actions, including those involving asbestos, commenced on or after the date of enactment. In an 8-to-8 vote, the Senate Commerce Committee failed to report out the bill.

John Danforth, (R-Mo.), Chairman of the Senate Committee on Commerce, Science and Transportation, has stated that he believes a compensation scheme should be part of any product liability legislation. To that end, on July 15, 1985, he circulated Staff Working Draft No. 1, which included a compensation program. In November 1985, Senator Danforth circulated Staff Working Draft No. 2. On December 20, 1985, Senator Danforth introduced S. 1999, the "Product Liability Voluntary Claims and Uniform Standard Act," 99 Cong., 1st session. At the time of the printing of this monograph, the legislation was being marked-up by the Senate Committee on Commerce, Science and Transportation.

²³²H.R. 1626, 99th Cong., 1st Sess. (1985). Senator William Armstrong and five co-sponsors introduced an identical bill, S. 1265, in the Senate.

²³³The House Labor Standards Subcommittee held hearings on the AWRA in June 1985. *See, e.g., supra* notes 18, 33, 35, 38.

²³⁴H.R. 3090, 99th Cong., 2d Sess. (1985).

²³⁵Representative Murphy proposes to achieve this goal without creating a new federal bureaucracy and without federal intervention in, or preemption of, state-controlled workers' compensation systems. *See* H.R. 1626 § 2(a)(6).

²³⁶*Id.* at § 2(a) (4), (5).

²³⁷*Id.* at § 101(b).

²³⁸*Id.* at § 101(b)(4).

²³⁹*Id.* at § 101(b)(3).

²⁴⁰*Id.* at § 101(c)(2)(B). In addition, the AWRA provides a "National Medical Panel" consisting of a chairman and four members, who would determine which diseases can be caused by occupa-

tional exposure to asbestos. Supplemental benefits would be available only for diseases that the panel identifies as asbestos-related. *Id.* at § 104.

²⁴¹*Id.* at § 102(a)(1).

²⁴²*Id.* at § 102(c)(1).

²⁴³*Id.* at § 103(a)(1).

²⁴⁴*Id.* at § 103(b)(1).

²⁴⁵*Id.* at § 3(4).

²⁴⁶*Id.* at § 201(a)-(b). The assessment would be reduced by certain amounts already paid by the defendant pursuant to a settlement, judgment or court-approved reorganization to claimants awarded supplemental benefits. *Id.* at 201(a)(2). A portion of each assessment would be levied directly against any insurance company that had granted coverage to a defendant. The insurer's liability would not exceed the face value of the policy plus allowances for the insurer's obligation to defend in asbestos lawsuits, minus prior assessments by the Fund. Each insurance company would be charged a portion of the defendant's assessment, in proportion to the individual insurance company's share of the total insurance available to the defendant from all insurers. *Id.* at § 201(d).

²⁴⁷*Id.* at §§ 201(c)(1), 202(a).

²⁴⁸*Id.* at §§ 201(c)(2)(B), 202(b).

²⁴⁹*Id.* at § 301(a)(1).

²⁵⁰*Id.* at § 301(a)(2). The restriction imposed by this provision of the Act would apply to all actions pending on, or commenced after, the effective date of the Act. *Id.* at § 301(a)(4).

²⁵¹H.R. 3090, *supra* note 235, at § 16(a)(1).

²⁵²*Id.* at § 2(B)(1).

²⁵³*Id.* at § 4(a). The bill, however, would not preempt claims under federal workers' compensation programs named therein. *Id.* § 4(e).

²⁵⁴*Id.* at § 10(d).

²⁵⁵*Id.* at § 10(c)(1).

²⁵⁶*Id.* at §§ 3(7), 10(g).

²⁵⁷Section 201(e) of H.R. 1626, for example, is unacceptable to manufacturers that have filed for reorganization under Chapter 11 of the United States Bankruptcy Code. Section 201(e)(3)(B)(ii) treats the assessments against the manufacturer for the Asbestos-Related Disease Trust Fund as an administrative expense that is assigned priority status:

“Any assessments . . . due and payable by the assessable company after the date the bankruptcy petition is filed but prior to confirmation of a Chapter 11 plan . . . shall be treated as an administrative expense arising in the ordinary course of business and afforded . . . priority status.

More importantly, § 301(e)(3)(C) provides that such assessments “shall be deemed to arise *after the confirmation* [of the plan] and shall therefore be nondischargeable . . . and shall survive against the assessable company and any successor or successors to the assessable company under the plan.” The requirements of subsections (B)(ii) and (C) would make it impossible for any company to emerge from bankruptcy, because it is unlikely that a creditors' committee would agree to permit contributions of a share of the debtor's assets to the fund envisioned by H.R. 1626. Therefore, it is expected that these provisions will be deleted from the hybrid bill.

In addition, while both bills provide that the compensation program is the workers' exclusive remedy with respect to his employer, the ODCA would still permit the worker to sue third parties, such as manufacturers. *See* H.R. 3090 § 4(a)(1). Any third party award, however, would be offset against the total value of the award from the ODCA compensation fund. *Id.* The hybrid bill would eliminate section 4(a)(1).

The hybrid bill also is expected to retain the requirement of Government participation in establishing a compensation fund, a provision the ODCA lacks.

²⁵⁸28 U.S.C. § 1491.

²⁵⁹28 U.S.C. §§ 1346(b), 2671-2680.

²⁶⁰*See, e.g.*, GAF Corp. v. United States, No. 287-83C (Cl.Ct. filed September 15, 1983).

²⁶¹The manufacturers have asserted third-party FTCA claims in Maine, Pennsylvania, Hawaii, Washington, North Carolina and Virginia. The Government has moved to dismiss those claims in Maine, Pennsylvania, Hawaii, Virginia and Washington. Three district courts have denied the Government's motion to dismiss. In re all Maine Asbestos Litigation, (PNS Cases) 589 F. Supp. 1571, (D. Me. 1984), *rev'd in part, aff'd in part*, 772 F.2d 1023 (1st Cir. 1985); *cert. denied*, 54 U.S.L.W. 3759-60 (U.S. May 19, 1986) (No. 85-1246); *Colombo v. Johns-Manville Corp.*, 601

F. Supp. 1119 (E.D. Pa. 1984); *In re All Asbestos Cases*, 603 F. Supp. 599 (D. Hawaii 1984). The one appellate court to have addressed the issue, however, reversed, holding that the manufacturers had failed to meet certain highly technical admiralty law requirements. The admiralty issues were neither addressed nor briefed by any of the parties; rather, they were raised *sua sponte* by the court. *In re All Maine Asbestos Litigation* (PNS Cases), 772 F.2d at 1029-31. *See also*, *Lopez v. A.C. & S., Inc.*, No. C84-155M (W.D. Wash. May 19, 1986).

²⁶²Under the FTCA prior to its amendment in 1966, a person whose tort claim against the Government was for \$1,000 (later raised to \$2,500) or less had the option of seeking voluntary administrative settlement of his claim, 28 U.S.C. § 2672 (1964), or of initiating a law suit directly in district court 28 U.S.C. § 1346(b). A person whose claim exceeded \$2,500 had no choice but to file suit; since an affected agency's authority to settle claims was limited by 28 U.S.C. § 2672 to \$2,500.

By 1966, it had become apparent that the inability of agencies to settle administratively meritorious claims for more than \$2,500 — and the consequent necessity of claimant's initiating federal court action for claims in excess of that amount — resulted in unnecessary litigation which imposed undue burdens upon the federal courts and undue delay and expense upon claimants. To remedy this situation, in 1966, Congress amended the FTCA to

provid[e] for more fair and equitable treatment of private individuals and claimants when they deal with the Government or are involved in litigation with their Government. . . . The [amendments] are intended to ease court congestion and avoid unnecessary litigation, while making it possible for the Government to expedite the fair settlement of tort claims asserted against the United States.

S. Rep No. 1327, 89th Cong., 2d Sess. (1966), *reprinted in* 1966 U.S. CODE CONG. & AD. NEWS 2515, 2515-16.

To achieve these results, Congress (i) eliminated the \$2,500 limitation on the agencies' settlement authority, and (ii) required that all tort claims be submitted initially to the affected agency for possible settlement. If the agency denies the claim—or if the agency fails to act within six months—then the claimant may file suit in district court. 28 U.S.C. § 2672 (1970).

²⁶³*See* Brief For the Appellee United States at 16-21, *GAF Corp. v. United States*, No. 84-5638 (D.C. Cir. filed Aug. 16, 1985).

²⁶⁴Justice Management Division, U.S. Department of Justice, *Congressional Authorization and Budget Estimates, Fiscal Year 1986, Vol. I*, at 102 (emphasis added).

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