

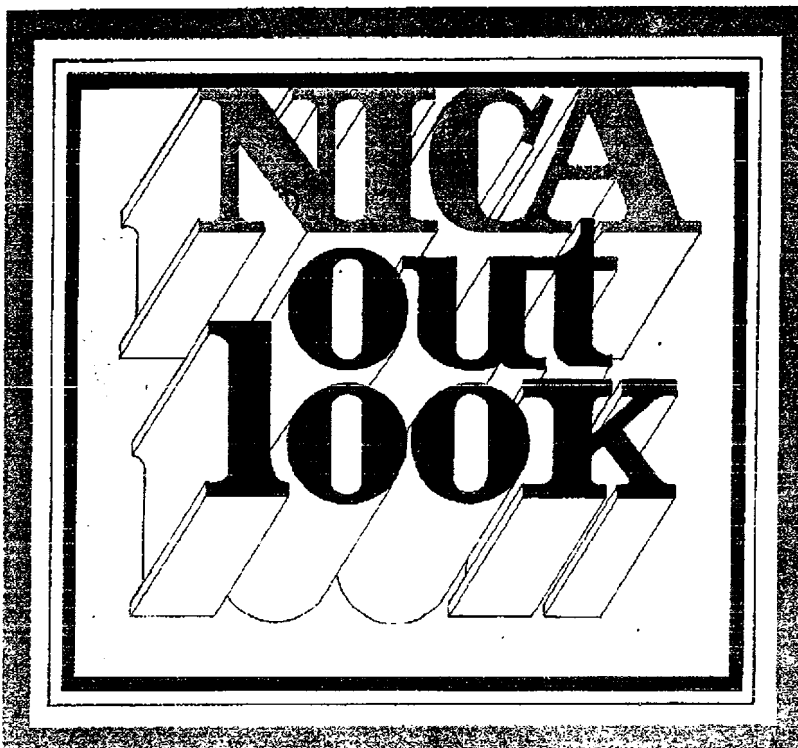
FILE NAME: Insulation Contractors & Distributors (ICD)

DATE: 1970 Oct

DOC#: ICD024

DOCUMENT DESCRIPTION: Trade Journal - NICA

5 - OCT - 9
Copy 1970



October, 1970

VOL. 15, NO. 10

*Published by
National Insulation Contractors
Association,
8226 Fenton Street,
Silver Spring, Maryland 20910*

available for
re-type for
ry baked-on

NICA out look

Published monthly by
National Insulation
Contractors Association
3226 Fenton St., Silver Spring, Md. 20910
telephone 301-585-8886

John C. Pollock, Executive Director
R. F. "Pat" Yount, Chairman of
the NICA Publication Committee

Officers 1969-1970

A. Marvin Gibbons, President
Theodore H. Brodie, President-Elect
Duane C. Luse, Treasurer
R. F. Yount, Secretary
J. Kenneth Dixon, Immediate Past
President

Board of Directors Terms Ending 1970

Wm. W. Harrison USICA
Robert Bright CSICA
Leon T. Choate At-Large
James P. Ennis At-Large

Terms Ending 1971

Palmer Covil SEICA
Paul D. Gauer MICA
W. E. Munsey WICA
W. R. Murfin SWICA

Terms Ending 1972

James R. Pfister MICA
Wm. A. Bayer EASICA
Homer C. Porter SWICA
Richard Stapleton At-Large
Ralph L. Sartori WICA
Wallace E. Robbins SEICA

Annual Subscription \$10 (which is in-
cluded in the Membership dues).
Single copy \$1.50.

Controlled Circulation paid at
Silver Spring, Md.

Statements of fact and opinion are made
on the responsibility of the author alone
and do not necessarily express the opin-
ions of the Association. Material may
not be reproduced without written con-
sent.

Copyright National Insulation
Contractors Association—1970

TABLE OF CONTENTS

VOL. 15

No. 10

THE PRESIDENT'S CORNER	3
<i>A brief review of two years of progress</i>	
YOUR EXECUTIVE DIRECTOR'S REPORT	5
<i>A man's a man for all that</i>	
COLLECTIVE BARGAINING	8
<i>In sad state of disrepair</i>	
AREA WIDE BARGAINING	10
<i>A concerned look at negotiations</i>	
SAFETY BILL WOULD DO HARM	14
<i>Chamber of Commerce speaks out</i>	
MICA'S PAST PRESIDENT LAYS IT ON THE LINE	18
<i>A hope for continued progress</i>	
ECONOMIC ANALYSIS	20
<i>Dismal Science—or Survival Insurance</i>	
MAIL BOX	6
ALIBIS WE REMEMBER	6
NEW PRESIDENT FOR B & B	13
WOMEN-LIBERATION-CONSTRUCTION	14
SAFETY DOESN'T PAY	24
PAY AND PRODUCTIVITY	29
NEW TRAINING TECHNIQUES	29
WHAT'S NEW FROM MANUFACTURERS	30
LABOR NEWS	33
INDEX TO ADVERTISERS	36

Safety Bill Would Do More Harm Than Good

By ARCH N. BOOTH

Executive Vice President, Chamber of Commerce of the United States

What employer doesn't want his workers to be safe in their jobs?

The health and safety of employees has been a matter of utmost concern for employers for many years. The reasons are obvious.

There's the human element. No employer who has seen one of his workers injured ever wants it to happen again.

And it's good business. Accident prevention promotes efficiency, cuts costs, boosts profit potential. Wage losses, production stoppages and medical and insurance bills which result from accidents are costly.

So it should not be surprising that the business community has taken the leadership in fighting accidents. Among the many safety organizations started by businessmen is the National Safety Council, called the National Council for Industrial Safety when organized in 1912.

The record has been good. With many millions of dollars spent for research, progress has been steady. Today the average American is safer at his job than he is at home, on the highway or at play. Almost twice as many deaths and disabling injuries occur at home as at work.

Even so, the search for improvement must go forward to achieve a safer and healthier industrial environment for all workers.

With this in mind, the National Chamber federation has supported legislation that would give the states incentives to develop better safety plans and, in President Nixon's words, would channel "power, funds and authority . . . increasingly to those governments that are closest to the people."

But any legislation, in addition to being effective, must also be fair.

Unfortunately, this isn't the case with the safety legislation now going through Congress.

This measure, by Chairman Dominick V. Daniels (D-N.J.) of the House Select Labor Subcommittee, could—if enacted—be one of the most disruptive of sound labor relations ever proposed.

It would allow employees to strike and receive full pay—even if no safety standards have been violated!

The bill would require employers to keep paying employees who walk off the job on the grounds they haven't been given the necessary safety equipment or sufficient information about a "potentially toxic substance."

Opportunity for further harassment would be lodged in a federal safety inspector who would have dictatorial power to shut down a place of employment when he discovers what he believes to be an "imminent danger."

Again, complete authority to *set* standards, to *police* them, and to *enforce* them would be lodged in one man—the Secretary of Labor.

We believe that a separation of these powers is necessary to assure full opportunity for fair treatment and to guard against abuses that often accompany bureaucratic control.

Sound legislation would provide for:

- (1) An independent board of experts to *set* standards;
- (2) The Department of Labor to *police* them; and
- (3) The courts to *enforce* them.

Only the courts should have the power to shut down a business.

Unfair measures like the Daniels bill would, if they became law, undermine much of the progress that has been made in the safety field.

The helping hand of the Federal Government could quickly turn into a stiff arm.

WOMEN— LIBERATION— and CONSTRUCTION

Women in Construction are women who are working in construction offices and not to be connected in any way with the Women's Liberation Movement wanting mens jobs in construction.

One sex is neither superior nor inferior to the other; they are merely different. Both want and need security, status, prestige and acceptance . . . and both are capable of envy, hostility, irrationality and masochism when their needs are frustrated. Each must play its own biological role and derive as much pleasure as possible therefrom, and each has its advantages and disadvantages.

The most successful politician is he who says what everybody is thinking most often and in the loudest voice.—Theodore Roosevelt

Dev

Ca

Sel

Environmental Sciences
Laboratory



of The City University
of New York

INSULATION HYGIENE PROGRESS REPORTS

FROM THE INSULATION INDUSTRY HYGIENE RESEARCH PROGRAM

Irving J. Seilkoff, M.D., Program Director

Vol. 2, No. 2

Summer 1970



This asbestos worker is applying insulation in the unventilated and confined space of a ship's engine room. Note asbestos-containing material on his overalls.

NYC Leads USA — Sets Rules For Spray

In a historic action, the Environmental Protection Administration and the Department of Air Resources of New York City have promulgated interim orders governing the spraying on City construction sites of any insulation material containing asbestos.

First Such Action

The orders went into effect April 13. They detail the steps that must be taken by spray contractors during application. These steps will minimize exposure to spray applicators, to other construction workers on a job site, and also to the general population living or working nearby.

This action by New York City is the first such in the United States. It brought to fruition a cooperative effort by Mount Sinai School of

Medicine's Insulation Industry Hygiene Research Program, New York City's Department of Air Resources, and various industry groups which began last summer.

As part of this cooperative effort, a joint program of asbestos sampling and analysis was initiated by Mount Sinai and the Department of Air Resources last July. At the same time the Sprayed Mineral Fiber Manufacturers' Association and the New York City Plasterers' Association met to establish industry safety practices and control procedures for spray application. (See Fall 1969 issue of *Insulation Hygiene Progress Reports*.)

In addition, consultation on various aspects of the problem of spray insulation took place between IHRP staff and building owners, architects, general contractors, and, especially,

(Continued on next page)

Shipyards Tour Shows Hazards to Workers

Air samples taken from ship compartments in eight shipyards of the Gulf Coast are now being examined for asbestos fiber content in the New York laboratories of the Insulation Industry Hygiene Research Program.

Two scientist investigators, Dr. Harry Heimann and Mr. William B. Reitze, secured the samples during a recent two-week tour. They visited yards at Houston, Galveston, Beaumont, New Orleans, Pascagoula, Mobile, Jacksonville and Tampa.

They carefully inspected aircraft carriers, destroyers, Navy supply ships, container ships, and tankers.

Arrangements for the tour were made through the cooperation of the United States Department of Labor and the International Office of the International Association of Heat and Frost Insulators and Asbestos Workers.

Other Workers Endangered

The handling of asbestos insulation products presents a health hazard not only to the insulation workers but also (because of the confined areas) to the allied shipbuilding trade workers.

Dr. Heimann and Mr. Reitze found that the three most serious hazards appear to be

1. the extreme dustiness during removal of old insulation
2. an almost total lack of ventilation in confined spaces
3. the spread of dust from work areas into other regions of the ship.

Methods to remove old insulation with a minimum of dust production are receiving top priority consideration by Mount Sinai's engineers.

The design of a typical ship includes many small compartments

(Continued on last page)



g pipes with asbestos-containing material in so confined a space as leads to the danger of breathing the dust.

Confined Spaces Add Yet Another Danger

The Insulation Industry Hygiene program has found answers to a number of problems in the asbestos insulation industry.

Coated calcium silicate pipe covering and block, plastic mixing bags, and proper use of dust collection devices are some of the solutions. All attain the dust at its source and all significantly reduce worker exposure to asbestos.

Portable Exhaust Systems

Some insulation work, however, presents problems not easily solved by containment at the source. Shipyard work, both application and removal, and covering steam lines in confined tunnels are two such types.

In these areas where there is poor ventilation in work areas, removal of dust is made difficult and temperatures may rise to much above 100° F. To these

twin problems, two complementary solutions are now being studied by IIHRP engineers—the use of portable exhaust systems and self-contained air supply respirators.

Cool Air to the Face

In the confined space of a tunnel, the use of an exhaust system at a nearby manhole can reduce both the dust level and the working temperature. In many cases, easily obtainable and inexpensive exhaust systems of less than 5000 cubic feet per minute capacity would suffice. IIHRP engineers and industrial hygienists will be pleased to assist any contractor or union having specific problems associated with tunnel work.

Aboard ship, some use is made of portable low-volume exhaust systems, designed principally to control fumes from welding operations. These systems, however, are ineffective in

Shipyards Tour Shows Hazards

(Continued from 1st page)

with little natural ventilation. When the ship is in operation, the air in these compartments is changed by means of a forced ventilation system. But during construction or rebuilding, it remains stagnant. Fine dust and fibers put into the air by fitting and handling calcium silicate block or amosite blankets remain suspended for hours.

Special Techniques Needed

Dust generated by hand sawing or fitting asbestos block can easily fall two or three decks through gratings. The fibers thus deposited throughout an engine room may contaminate a ship for months. Here the use of drop cloths or boxes to contain the dust can improve conditions measurably.

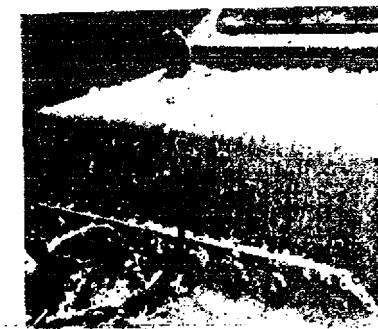
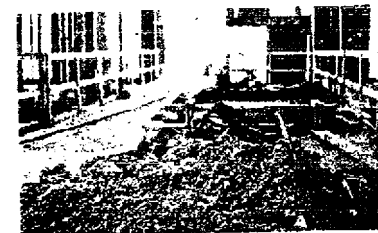
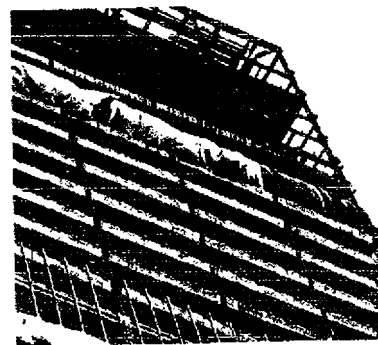
Some of the methods being developed by the Insulation Industry Hygiene Research Program for controlling asbestos dust at land-based building construction sites can be used aboard ships. It is evident, however, that further special dust control techniques will have to be developed for the protection of all craftsmen in shipbuilding trades. Hence, the priority now being given to these problems by the IIHRP.

changing the large volume of air in most ship compartments.

In some spaces having large volumes of air, exhaust systems of sufficient capacity to maintain clean air are either too costly or impractical to use. In these cases the solution may lie in self-contained battery-operated air supply respirators.

These respirators—far more comfortable to wear than standard ones—not only provide almost absolute respiratory protection from dust, but provide a cool stream of air to the worker's face. Batteries and motors have already been developed of sufficiently light weight as not to be objectionable. Several later models are under study by the IIHRP and full details and descriptions will be forthcoming in a future issue of *Insulation Hygiene Progress Reports*.

Text of the New Spray Rules:



Four examples of trade practices the new rules ban: (top to bottom) Spraying without any containment at all; inadequate tarping; asbestos-containing debris uncleared up; and spray material that has been allowed to fall down on to construction equipment.

1. Before the start of spraying operations all floor areas shall be swept broom clean. Before the application of asbestos-containing material commences, the floor of the area shall be cleared of all objects, material and equipment other than that employed in the application of the asbestos-containing insulation or all objects, materials, etc. shall be covered with plastic or plastic-coated tarpaulins in a manner that precludes the subsequent dispersal of asbestos particulates.

2. The entire floor, or the part of the floor to be insulated, shall be enclosed with plastic or plastic-coated tarpaulins in a manner which shall preclude the escape of asbestos-containing material from the enclosure. All interior open areas, such as elevator shafts, stairwells, etc. shall be enclosed in a manner which shall prevent the escape of asbestos-containing material from the working area. "Stack effect" of the shafts, stairwells, etc., shall be considered in providing proper enclosures. An enclosure will be considered satisfactory only if visible insulating material cannot escape from the enclosure.

3. Wet asbestos-containing material which has fallen to the floor shall be immediately swept up and placed in a container having walls, bottom, and a tight cover strong enough to resist tearing or breaking under normal handling conditions and clearly marked as containing asbestos waste. The contents of the aforementioned containers shall not be transferred to another container, but the container shall be placed directly upon a vehicle for disposal at an approved site.

4. All floors will be vacuumed shortly after drying. The vacuum cleaner shall contain a strong, single-service, disposable inner bag of durable material which shall be removed from the vacuum cleaner and tightly sealed. The bag shall then be placed in a container of the type described in paragraph 3, which shall thereafter be placed on a vehicle for removal and disposal at an approved site.

5. The materials used to form the enclosure shall be thoroughly vacuumed upon completion of the application of the insulation in the area. The entire floor area, all ledges and surfaces including tarpaulins upon which waste insulation material may have fallen, shall then be vacuumed or revacuumed before removal of the enclosures.

6. Enclosures shall not be dismantled until the area has been thoroughly vacuumed after completion of spraying and cleanup.

7. All areas used for opening bags containing asbestos insulating material and/or charging of hoppers shall be enclosed in such a manner that asbestos-containing insulating material shall not be permitted to escape from the immediate area in which such activity takes place.

8. Signs shall be posted outside enclosures warning persons of the hazard of entering the enclosure without appropriate mask and other apparel.

9. All persons involved in the spraying of asbestos at the site must be furnished with Bureau of Mines approved respirators for pneumoconiosis-producing dust and must be furnished with suitable coveralls which will be left at the site and thereby preclude the removal of asbestos from the site. No person shall be permitted in an area in which asbestos spraying or handling has taken place until final vacuuming referred to in paragraph numbered "5" herein, unless such person is furnished with and wears a Bureau of Mines approved respirator for pneumoconiosis-producing dust and coveralls of the type described herein. Facilities shall be provided and procedures instituted and supervised that preclude the removal and dispersal of asbestos-containing material from the construction site on the clothing or other appurtenances of persons leaving the area.

10. Any plenum or other structures coated with asbestos-containing insulation which is intended for use in the circulation of air in the building must be thoroughly cleaned of all debris and waste insulation. All applied asbestos-containing insulation within a plenum or duct must be coated with a sealant which precludes exposure of the asbestos-containing material to the circulating air.

Insulation Hygiene Progress Reports

Vol. 2, No. 2

Summer 1970

from the

Insulation Industry Hygiene Research Program

Editor: W. J. Nicholson, Ph.D.,
Published at the Environmental Sciences Laboratory (Irving J. Selikoff, M.D., Director), Mount Sinai School of Medicine of the City University of New York, New York, N.Y. 10029

Advisory Council of IHRP

Irving J. Selikoff, M.D. Program Director and Chairman

E. Cuyler Hammond, Sc.D. Vice President, American Cancer Society, New York, N.Y.

Albert Hutchinson, General President, International Association of Heat and Frost Insulators and Asbestos Workers, Washington, D.C.

B. Jobe, Vice President, Johns-Manville Corporation, New York, N.Y.

Fred L. Pundsack, Ph.D. Vice President, Research and Development, Johns-Manville Corporation, New York, N.Y.

George W. Wright, M.D. Director of Medical Research, St. Luke's Hospital, Cleveland, O.

PURPOSES OF THE INSULATION INDUSTRY HYGIENE RESEARCH PROGRAM

1. To develop improved methods for minimizing exposure of insulation workers to dusts and fumes encountered in their work.
2. To disseminate knowledge of these improved methods of dust control wherever they may be applied advantageously and to offer cooperation, advice and assistance toward their universal adoption.



(l. to r.) New York's Mayor Lindsay, Commissioner of Air Resources Robert N. Rickles, and Environmental Protection Administrator Jerome Kretchmer discuss the new spray orders at City Hall.

NYC Leads USA—Sets Rules For Spray

(Continued from 1st page)

the World Trade Center engineers and their general contractor, Tishman Construction Company.

The interim orders will remain in force until adoption of final regulations following public hearings. The hearings are to be held within six weeks, according to Jerome Kretchmer, newly appointed New York City Environmental Protection Administrator. The new rules include requirements that

- (a) any spray area be completely enclosed by tarpaulins,
- (b) the area be vacuum-cleaned after application, and
- (c) insulation in air circulation plenums or ducts containing asbestos be coated with a sealant to preclude erosion of asbestos-containing material into the air of the building.

(See page 3 for complete regulations.)

Some Contractors Made Effort

Dr. Robert N. Rickles, New York City's new Commissioner of Air Resources, emphasized the need for specific procedures that are enforceable and noted that voluntary measures to

reduce environmental exposures were not uniformly followed.

"Some contractors," he added, "made an effort to contain their spray operation." (See Spring 1970 issue of *Progress Reports* for story on World Trade Center.) "Other operators, however," he went on, "made only minimal efforts at containment. We also found that cleanup of waste was a serious problem everywhere, with workers of all trades being exposed continually to the debris of spray fireproofing insulation."

Dr. Irving J. Selikoff, IHRP Director, endorsed the City regulations. "The technology for safe application of sprayed mineral fireproofing material exists," he said. "However, the utilization of appropriate containment and cleanup techniques must be uniform throughout the industry if we are to succeed in solving the health problem of mineral fibers in urban air."

"It is of importance, too, to note the Environmental Protection Administration's concern with coatings of air plenums in buildings already in construction since it wishes to insure that air in ventilating systems not be contaminated by foreign material."

Four e-
new r-
Sprayir
all; It
contain
spray r-
to fall
equipm

Environmental Sciences
Laboratory



of The City University
of New York

INSULATION HYGIENE PROGRESS REPORTS

FROM THE INSULATION INDUSTRY HYGIENE RESEARCH PROGRAM

Irving J. Selikoff, M.D., Program Director

Vol. 2, No. 5

Fall 1970

Available Soon— The Disposable Respirator

At last—adequate respiratory protective devices will soon be available to insulation workers. Several companies are now producing disposable respirators which will both provide protection and be acceptable to workmen.

In one test conducted by the Insulation Industry Hygiene Research Program (IIHRP) of a commercial model manufactured by the Minnesota Mining and Manufacturing Co., the worker acceptance was very high. Favorable comments on such matters as breathing resistance, weight, interference with vision, and comfort exceeded unfavorable ones by three or four to one. Previous tests with this respirator demonstrated its ability to meet the Bureau of Mines standards.

Other Commercial Models

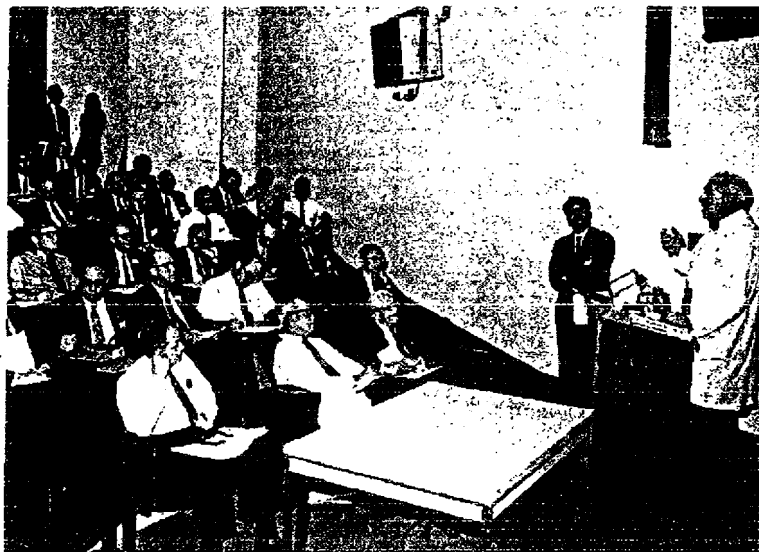
In addition to the respirator already field tested, the IIHRP will soon be field testing other commercial models for use in asbestos insulation work.

The tortuous journey to a commercially available disposable respirator began at Mount Sinai's Environmental Sciences Laboratory nearly two years ago. At a meeting then with safety equipment manufacturers, the need for respirators suitable for use in the construction industry, and particularly in insulation work, was put forward.

Single-Use Only

Because of the extreme difficulty of operating a good respirator-maintenance program on construction sites, single-use respirators were a necessity. Moreover, many states required that only U.S. Bureau of Mines approved respirators be used.

(Continued on page three.)



Dr. Irving J. Selikoff (r.) and Dr. Y. Suzuki (2d r.) of Mount Sinai's Environmental Sciences Laboratory addressed the participants of the post graduate course on asbestos disease.

World's First Course in Asbestos Effects

As a historic first in occupational medicine, The Mount Sinai School of Medicine presented a four-day postgraduate course during June on all aspects of the health effects of asbestos. The course was given to 43 physicians and scientists from all regions of the U.S. and six other countries including England, Wales, Germany and Canada.

The program was under the direction of Professor Irving J. Selikoff, Director of the Environmental Sciences Laboratory of Mount Sinai.

All the Worker's Problems

Extensive presentations were made and discussions held on all clinical aspects of asbestos disease including patient management, x-ray diagnosis, pulmonary function analysis, and pathology. Epidemiology of asbestos-related disease in both occupational

and environmental circumstances was also discussed.

The full spectrum of problems facing the insulation worker was presented including description of insulation operations especially contributing to high dust levels. Industrial Hygiene procedures found to reduce these levels such as the use of efficient dust collectors, plastic cement bags, coated calcium silicate block, and appropriate face respirators were also demonstrated.

Trips to Construction Sites

The course included field trips to see the application of thermal insulation material at both large and small construction sites in New York and New Jersey, arranged by Jacob Novak and James Mulhearn, International Vice Presidents of the Asbestos

(Continued on page two.)

Insulation Hygiene Progress Reports

Vol. 2, No. 3 Fall 1970

from the

Insulation Industry Hygiene Research Program

Editor: W. J. Nicholson, Ph.D.,
Published at the Environmental
Sciences Laboratory (Irving J. Selikoff, M.D., Director), Mount Sinai
School of Medicine of the City University of New York, New York,
N.Y. 10029

Advisory Council of IHRP

Irving J. Selikoff, M.D. Program
Director and Chairman

E. Cuyler Hammond, Sc.D. Vice
President, American Cancer Society,
New York, N.Y.

Albert Hutchinson, General President,
International Association of Heat
and Frost Insulators and Asbestos
Workers, Washington, D.C.

B. Jobe, Vice President, Johns-
Manville Corporation, New York,
N.Y.

Fred L. Pundsack, Ph.D. Vice Presi-
dent, Research and Development,
Johns-Manville Corporation, New
York, N.Y.

George W. Wright, M.D. Director of
Medical Research, St. Luke's Hospi-
tal, Cleveland, O.

PURPOSES OF THE INSULATION INDUSTRY HYGIENE RESEARCH PROGRAM

1. To develop improved methods for minimizing exposure of insulation workers to dusts and fumes encountered in their work.
2. To disseminate knowledge of these improved methods of dust control wherever they may be applied advantageously and to offer cooperation, advice and assistance toward their universal adoption.

World's First Course in Asbestos Effects

(Continued from first page.)

Workers Union.

Visits to the world's largest asbestos mine in Quebec, Canada and to an asbestos manufacturing plant in Manville, New Jersey, were arranged through the cooperation of the Johns-Manville Corporation.

A Day in the Lab

Those interested in the laboratory aspects of asbestos sampling and extracting from tissue and air as well as electron microscopic studies of the pathology of lung tissue reaction to inhaled asbestos fibers spent a day in the laboratories of Mount Sinai School of Medicine's Environmental Sciences Laboratory.

Each day at lunchtime speakers discussed broad aspects of environmental and occupational health. One of them, Dr. René Dubos, Professor of Pathology and Microbiology at Rockefeller University, spoke on "Ecological Perspectives of the 1970's".

Frank and Open Discussion

Dr. Douglas H. Lee, Associate Director of the National Institute of Environmental Health Sciences, and Dr. Marcus Key, Chief, Bureau of Occupational Safety and Health of the Public Health Service, were other

featured speakers.

Dr. Selikoff commented with pleasure on the diversified background of the participants and on the frank and open discussions held among themselves and with the faculty.

Unions Sponsor M.D.s

"We had physicians sponsored by local unions of the Asbestos Workers," he said, "representatives of the National Insulation Contractors Association, and medical directors of asbestos manufacturing companies all meeting together with a single purpose—to improve the health of the asbestos worker."

"It's also noteworthy that more than a dozen registrants were representatives of the Public Health Service or various State Departments of Health. This demonstrates an increasing awareness by federal and state agencies of the multiplicity of problems facing Asbestos Workers."

What The Class Said:

"The most informative course I have ever attended."—H. Blejer, M.D., California Dept. of Health.

"Enjoyable and stimulating."—W. Smither, M.D., Medical Director, Cape Asbestos Co., London.

"Superb seminar."—G. Campbell, M.D., Coordinator, Mississippi Regional Medical Program.



Prof. René Dubos (c.) of Rockefeller University speaking during a discussion at the asbestos disease course.

But
iste
resq
els
I
mal
abl
fiel
17
Wo
resq
tion
feat
and
assi
equi
able

But
A
has
reat
listir
possi
appi
quir
meet
effici

A bat
worm
tests.
are at

Disposable Respirators Will Be Available Soon

(Continued from first page.)

But no Bureau of Mines schedule existed that was suitable for disposable respirators. Hence no approved models were commercially available.

In the research towards the goal of making disposable respirators available, the IIHRP has helped arrange field tests in which members of Local 17 in Chicago of the Asbestos Workers participated by wearing respirators and giving their observations of the desirable and undesirable features of the devices. These trials and results were extremely helpful in assisting manufacturers to devise equipment which is as unobjectionable as possible and still effective.

Bureau of Mines Criteria

An important recent development has been the action of the U.S. Bureau of Mines in issuing a schedule listing criteria for approval of disposable single-use respirators. This approval schedule lists essential requirements which respirators must meet. Among the requirements are efficiency of dust removal, resistance

to breathing, and adequacy of face fit. The criteria insure that all respirators will give adequate protection.

Another significant development now taking place is the preparation of an American National Standards Safety Guide for protection against asbestos-containing dust. This standard is being written by a subcommittee of the American National Standards Institute's Committee on Respirators.

When to Wear Them

The subcommittee, chaired by Duncan Holaday of the IIHRP, is composed of representatives of regulatory agencies, the International Association of Heat and Frost Insulators, the Insulation Contractors Association, respirator manufacturers, and research and university groups.

The standard developed will detail circumstances in which respirators should be worn, and also give guidance in selection of respirators and any information which is necessary for the operation of a respiratory protection program.

Certain operations, however, produce so much dust that more protection is required than can be obtained by half-mask respirators. One such condition is the tearing out of insulation aboard ship in confined spaces.

Air-Conditioned!

A battery-operated device which supplies filtered air to the respirator and is suitable for use in extremely dusty conditions was recently tested by the IIHRP at the World Trade Center in New York. This equipment was developed by Prof. William Burgess at the Harvard School of Public Health working in cooperation with the American Iron and Steel Institute.

It is not yet commercially available, but many units have been constructed and are being tested in several industries. The device is lightweight and will operate for eight hours on one battery charge. Full field tests are planned and will be reported on in a later issue of *Insulation Hygiene Progress Reports*.

HELP WANTED

—AGAIN—

There is a reservoir of talent, knowledge and expertise in the insulation industry, that has barely been tapped—that of the Asbestos Worker. His knowledge of problems and perhaps solutions that he has found effective should be available to the entire industry.

In the development of practical solutions for the dust problems in insulation work, comments and suggestions of members of the International Association of Heat and Frost Insulators and Asbestos Workers have been of prime importance.

In field trials of respirators, dust collectors, or new cement mixing methods, the effectiveness of each procedure was tested against the experience of the men involved.

In future issues of *Insulation Hygiene Progress Reports* we would like to feature comments, suggestions, and ideas of asbestos workers throughout the country.

We welcome your help. We need your help. Please send any comments or suggestions you may have to me at Mount Sinai School of Medicine in New York City.

I. J. Selikoff, M.D.
Program Director



A battery-powered air supply respirator is worn by Duncan Holaday during efficiency tests. For this test two air-sampling pumps are attached to his belt.



The battery pack and air filtration unit of the air-supplied respirator. This respirator is for use only in extremely dusty conditions.

Plastic Cement Mixers Are The Next Thing

Dr. Fred L. Pundsack, Vice President for Research and Development of Johns-Manville Corporation, will market their line of asbestos cement in plastic bags beginning in September.

These bags will allow water to be added and the cement to be mixed inside the bag. A previous study by the IIHRP demonstrated that dust levels could be reduced to one tenth that of standard tub or bucket mixing methods.

No Extra Equipment Needed

The bags used are suitable for use with conventional bag-filling equipment. Thus they can be introduced industry-wide with no additional investment in plant equipment.

The IIHRP has made available to all manufacturers of asbestos cement, samples of the bag used by Johns-Manville as well as information on the effectiveness of its use.

"Experience Valuable"

Dr. William J. Nicholson, IIHRP Program Coordinator, stated: "The clear benefits to insulation workers will only come through industry wide acceptance of this mixing method. As in any variation of trade practices, practical experience will undoubtedly have much to contribute in the rapid introduction of this important safety measure."



Charles Collins, President of Local 30 of the Asbestos Workers Union, cutting calcium silicate block during the powered hand-saw trials at the Hoffman Air Systems plant in Syracuse, New York.

Saber Saw May Answer The Sawdust Problem

The insulation application trade has a sawdust problem. The hand-saw—most commonly used tool by asbestos workers—generates significant dust, and such saws cannot yet be fitted with suitable dust-control devices.

Tests Show Less Dust

As an alternative to extensive

handsawing, the IIHRP is currently investigating cutting devices which can be fitted with portable dust control units. One such unit offering possibilities for dust reduction is the saber saw. Preliminary tests have shown that a saber saw fitted with the proper blade and appropriate dust collector can reduce the level of dust produced when calcium silicate materials are cut.

These early trials also demonstrated that only heavy-duty saws would be suitable. Currently studies are under way to determine the right combination of saw, blade, and dust collector for standard cutting jobs.

Don't use Hand for Band

Because of the size of existing dust collectors, the use of a saber saw thus equipped would be limited to powerhouse work and on industrial sites having well-localized insulation applications.

A word to the wise: powered hand saws should not be used as a substitute for band saws which can be equipped with dust collectors of greater efficiency (see *Insulation Hygiene Progress Reports* Vol. 1, No. 4).



A plastic mixing bag containing asbestos cement being filled with water through a valve at the top of the bag.