

FILE NAME: Insulation Contractors & Distributors (ICD)

DATE: 1974 June

DOC#: ICD040

DOCUMENT DESCRIPTION: NICA Outlook

ICA

OUTLOOK

1974

Vol. 19 No. 6

The Spirit of



NATIONAL INSULATION CONTRACTORS ASSOCIATION

NICA

OUTLOOK

National Insulation Contractors Association

Our "Outlook" has Changed!

As you noticed on the front cover, our "Outlook" has changed!

No association can afford to stay the same forever. It must move aggressively forward to meet today's needs, always keeping in mind yesterday's lessons and tomorrow's challenges. The energy crisis swept us into a new era. Our outlook has broadened as insulation contractors work together to increase energy conservation.

The new cover design is intended to reflect the insulation industry's expanded outlook. We hope it causes all NICA members to reflect on how they can become more active participants in the new, aggressive spirit of the association.

National Insulation
Contractors Association
Montgomery Center
8640 Fenton Street - Suite 506
Silver Spring, Maryland 20910
telephone 301-585-8441

John C. Pollock, Executive Director
A. H. Wotherspoon, Chairman
NICA Publications Committee

Officers 1974

W. Robert Martin, President
William A. Bayer, President-Elect
Herbert Muller, Vice-President
L. C. Long, Treasurer
C. B. Wheatley, Secretary

Board of Directors**Terms Ending 1974**

Robert Brighi, NSICA
Dee C. Luse, MICA
Palmer Boyd, SICA
Teroy Whitaker, WICA

Terms Ending 1975

Walter Snipe, IASICA
Harold McLaughlin, NYSICA
Wayne W. Killian, SICA
L. N. Dillard, SWICA
Ralph L. Sartori, WICA
James W. Laidell, At-Large

Terms Ending 1976

J. Roger Hartley, CSICA
Clifton Johnson, EASICA
William O. Mauldin, MICA
Raymond U. Wopperer, NYSICA
Charles B. Morton, SWICA
J. S. Rover, At-Large

Immediate Past President

W. F. Munsey

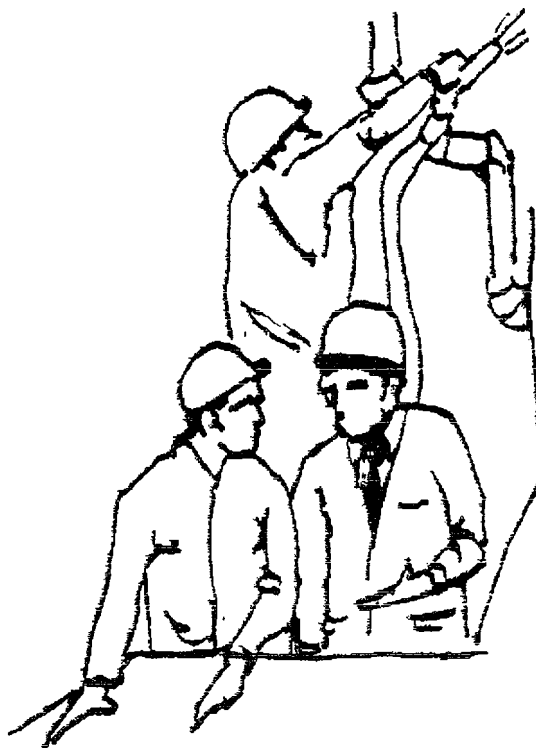
Annual Subscription \$10 [which is included in the Membership Dues] Single copy \$1.50
Controlled circulation paid at Silver Spring, MD. Statements of fact and opinion are made on the responsibility of the author alone and do not necessarily express the opinions of the Association. Material may not be reproduced without written consent.

Copyright National Insulation
Contractors Association - 1973

TABLE OF CONTENTS

VOL. 19	JUNE 1974	NO. 6
The President's Letter		2
Your Executive Director's Report		4
Spirit of '74		6
Working With You and For You		10
Three-Legged Stool		14
Ferguson Brings Impressive Credentials to NICA Labor Relations Post		16
Our Job Safety Law		20
NICA's 19th Annual Convention Registration Form		27
NICA's 19th Annual Convention Tentative Program		32
How To Conduct An Energy Audit		36
TIMA Introduces ECON II		44
What's New From Manufacturers		45
ECON I Provides Detailed Information		46
Calendar of Coming Events		49
Revised Construction Forecast Shows Impact of Inflation for 1974		52
NICA Mail Box		53
Technical Challenge		54
Working Cash vs. Capitol Cash		56

Our Job Safety Law Should Say What It Means



By Robert D. Moran, Chairman, Occupational Safety and Health Review Commission

Reprinted from Nation's Business

In 1970, Congress enacted a law to protect the health and safety of American workers.

Surely, no one could quarrel with that. Yet the law was greeted instantly with a chorus of boos and a barrage of brickbats.

Nor has time stilled its critics. Today, almost four years later, the Occupational Safety and Health Act has about as many warm friends as acne has.

Why did legislation so well intended misfire so badly?

In this article, an expert gives his answer. He is head of an independent agency created by Congress to hear and decide appeals from rulings by Occupational Safety and Health Administration inspectors

It is generally agreed that the objectives of the Occupational Safety and Health Act of 1970 can be fully achieved only when all employers are persuaded to comply voluntarily with its requirements.

I share this belief

But I also believe that many of the existing job safety standards, as written, don't clarify what must be done to achieve compliance.

Before I get down to specific cases, let me state what I think these standards should do.

A standard is developed—and promulgated—because of the existence or the potential existence of a condition that's dangerous to the

safety or health of workers. The purpose of the standard is to tell employers what they must do to eliminate, reduce or prevent the hazardous condition.

For example: Experience has shown it is dangerous to work as a painter on the Golden Gate Bridge—or other bridges like it. The hazard is that you could easily fall several hundred feet to almost certain death.

We know this hazard could be reduced if a net, capable of catching falling workers, were strung under the bridge. Or else, if we required the painters to wear safety belts hitched in such a manner that a fall wouldn't mean a plunge into the depths of the strait that the bridge spans.

Now, writing a safety standard for this is not an insurmountable problem. The hazard to be prevented is falling from the bridge to the water below. The standard should specify what must be done to prevent the fall or to interrupt it before it can cause injury or death.

We, therefore, can see that there are two rather basic ingredients which are essential to every valid job safety and health standard:

First, identify the hazard.

Second, specify what must be done to prevent its occurrence.

If all standards included these two fundamentals in understandable language, I am sure the number of job safety inspections which result in citations for alleged violations thereof would be dramatically reduced.

And that, of course, is what everybody wants: More compliance and fewer violations

Even if the Labor Department's Occupational Safety and Health Administration (OSHA) tripled its staff of inspectors, a rather unlikely prospect, they could inspect only 10 percent of America's workplaces—and do so only once a year. This wouldn't go far enough toward achieving the Act's purpose of eliminating injuries and diseases which workers receive from their jobs.

The vast majority of America's employers don't want their employees hurt and don't want to violate the law.

Riddles for the employer

So OSHA hopes for voluntary compliance with federal job safety and health standards. But far too many standards are, to paraphrase Winston Churchill, "riddles wrapped in mysteries inside enigmas." They don't give the employer even a nebulous suggestion of what he should do to protect his employees from whatever-it-is, also left unexplained, which represents a hazard to their safety and health.

For example, what does the following standard tell you to do in order to avoid conditions at your place of employment which are potentially hazardous?

"No contractor or subcontractor . . . shall require any laborer or mechanic . . . to work in surroundings or under any working conditions which are unsanitary, hazardous or dangerous to his health or safety."

These are laudable sentiments, but nowhere does the standard hint at what these unsanitary, hazardous or dangerous conditions might be. Apparently, that has been left to the employer to guess, and for OSHA to decree with hindsight, if he guesses wrong.

With this sort of direction, the most safety-conscious employer could have no idea what to do to meet the requirements. Perhaps, such a standard can be complied with by saying "Amen" and hoping for the best.

Unfortunately, however, OSHA has issued at

BRUSHES for the insulation trade

• IMMEDIATE DELIVERY ON LOW PRICED ADHESIVE BRUSHES
WRITE FOR FREE SAMPLE AND QUOTATION

MARCUS BRUSH COMPANY

444 West 23rd Place

Chicago, Illinois 60616

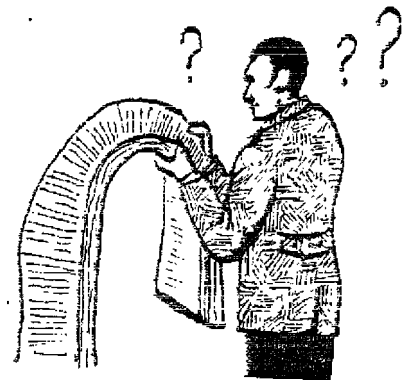
Phone 312-326-2707

least one citation against an employer for alleged failure to satisfy this standard, proposing a \$500 penalty. His alleged offense was that his employees were "required to work under an unsupported concrete placing pipeline."

Clearly, there isn't an employer in the world who can look at this standard and know that it tells him to keep his employees out from under unsupported concrete placing pipelines.

Fortunately, in this case, the employer contested the charge and the Review Commission dismissed it. But this standard is still on the books and I wouldn't be the least bit surprised to see OSHA use it again—and in a case which doesn't involve unsupported concrete placing pipelines.

What can happen when someone takes steps which he thinks meet the requirements of one of these vague standards was illustrated in a case decided by the Commission last August.



"Other means"

The standard prohibits an employee from working "in such proximity to any part of an electric power circuit that he may contact the same in the course of his work unless the employee is protected against electric shock by de-energizing the circuit and grounding it or by guarding it by effective insulation or other means...."

In this case an employee spliced a live electrical power line, a line neither owned nor controlled by his employer, and in performing this job he protected himself from shock by placing a piece of plywood on the ground and standing on it while he made the splice.

The means he chose were successful, since he suffered no ill effects. OSHA charged his employer with a violation because the splice was allegedly made in a manner inconsistent with the standard's requirements.

This charge, of course, was the result of hindsight. OSHA gave no hint in advance that plywood was not a means of obtaining effective insulation when splicing wire.

It seems to me that when a standard simply lists "other means" as an acceptable criterion for

NICA OUTLOOK

meeting its requirements, and does not precisely list or limit the "other means" contemplated, that standard provides no guidance for employers who want to know what OSHA expects them "voluntarily" to do.

If we don't get more specific, no one will know what will and what won't prevent the existence of the hazard. In addition, the employer is left at the mercy of the inspector whose interpretation of what constitutes "other means" is never known in advance and will, of course, vary from inspector to inspector.

In this particular case, OSHA claimed, in effect, that the standard means the guarding shall be by using effective insulation or other methods as determined by whatever OSHA inspector conducts the investigation.

There is no way under the sun that an employer can voluntarily comply with a standard applied in this manner.

Before voluntary compliance can become fully realized, OSHA will have to heed the words of Benjamin Cardozo, the famed jurist, who stated in a decision issued over 50 years ago: "A prohibition so indefinite as to be unintelligible is not a prohibition by which conduct can be governed. It is not a rule at all; it is merely exhortation and entreaty."

(Almost) anything goes

Let me turn now to one of OSHA's favorite standards—it must be a favorite for it turns up in so many of our cases. This particular standard is so nebulous that almost anything is covered by its umbra. I apologize for asking you to read it in full, but one has to see its full text to appreciate its all-encompassing richness:

"Protective equipment, including personal protective equipment for eyes, face, head and extremities, protective clothing, respiratory devices and protective shields and barriers, shall be provided, used and maintained in a sanitary and reliable condition wherever it is necessary by reason of hazards of processes or environment, chemical hazards, radiological hazards or mechanical irritants encountered in a manner capable of causing injury or impairment in the function of any part of the body through absorption, inhalation or physical contact."

What do you think it tells us to do?

I have no idea—and I don't think OSHA could tell you, either, before an inspection, citation, complaint, hearing and post-hearing brief.

Some people may read it and conclude it requires that hard hats be worn by construction workers. But can you be sure it doesn't also require something else? I submit that there isn't a

person on earth who can be certain he is compliance with the requirements of this standard at any particular point of time.

If you have some knowledge of professional baseball, football, hockey or basketball—which must comply with this standard—can be sure that all employees (players) are always full compliance? How about umpires, referee and other officials?

Once you are satisfied with your answer, please consider circus performers: the high-wire trapeze artist or the lion tamer.



If you are a farmer or lifeguard or some employee who works out-of-doors, what is needed to protect you from skin cancer or sunburn caused by the sun's rays? What protection is needed from other "hazards of . . . environment" such as rain, wind, snow, ice, air pollution?

The answers to these questions are difficult, but bear in mind that an employer who comes up with wrong answers is subject to monetary penalties.

This particular standard has already been applied in one case which has been decided by the Review Commission.

An OSHA inspector looked at a freight-loading operation at one employer's terminal. He then made an *ad hoc* and, I think, purely subjective determination that there was "a hazard of environment" (boxes of freight that might be dropped and wheels of various kinds of material-handling equipment that could possibly roll over someone's toes) for which "extremities" (feet) required "protective equipment."

He said that meant safety shoes, but although there are many different kinds of safety shoes he didn't get more specific.

Thus, although "freight" and "wheels," "feet" and "safety shoes" are nowhere mentioned in the standard, OSHA charged that the employer violated its requirements because the employees did not have their feet covered by safety shoes.

Due process is your due

Now you've all heard about the due process clause of the Constitution. It requires that a potential offender have fair warning that the conduct he engages in is a violation of law. To me, the substance of this regulation simply does not afford any advance notice of the conduct which it either requires or prohibits.

To permit enforcement of so vague a standard is to subject the employer to the unbridled discretion of OSHA inspectors in the determination of what constitutes compliance.

How can an employer voluntarily comply with standards that he could not possibly understand until after he has been cited for a particular inspector-determined infraction? And what must he do to satisfy the interpretations of the next inspector?

There are many kinds of protective equipment for one's feet. For example, stockings may guard against infections such as athlete's foot and sandals will protect you against picking up cuts on the bottom of the foot, but neither will help your toes if they come in contact with a dropped brick or an immovable object.

One inspector could say that neither stockings nor sandals constitute protective equipment for extremities but that only leather shoes with iron toes meet the requirements of this occupational safety and health standard. The next could specify that only shoes with certain nonskid soles would suffice. Another could hold that only shoes bought from a named manufacturer or retailer qualify.

I think you can see the danger in this type of yardstick. The inspector tells you what the hazard of the environment is—then he tells you what protective equipment your employees should have been wearing when he made his inspection.

Before anyone says that it is up to the Review Commission and its judges to interpret whether any particular charge constitutes a violation of this standard, let me quote from the Supreme

Court's 1966 decision in the case of *Giaccio*, Pennsylvania:

"It is established that a law fails to meet the requirement of the Due Process Clause if it is so vague and standardless that it leaves the public uncertain as to the conduct it prohibits, or leaves judges and jurors free to decide, without any legally fixed standard, what is prohibited and what is not in each particular case."

One of the principal evils of vague regulations is that they leave the definition, and therefore the creation of crimes, to the unbridled discretion of cops on the beat or local inspectors or trial court judges.

Police state tactics?

I submit that this is one reason why OSHA has been criticized for police state tactics.

The generally accepted definition of the term "police state" is a place where the police decide what the law is—and the law may vary from policeman to policeman and from victim to victim.

We have always prided ourselves on having a government of laws, not men. This means the laws must be exact enough so that individual police officers cannot improvise upon them, amplify them or apply them differently.

Until all occupational safety and health standards are thus, employers are likely to be at the mercy of the inspectors and cries of police state will no doubt continue.

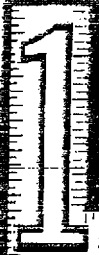
But let's not forget the employer's plight for the moment.

The purpose of this law is to protect employees. This will be accomplished by providing safe and healthful working conditions for all. Unfortunately, however, such a state of affairs cannot be achieved until employers are regulated by job safety standards which set forth meaningful and clearly discernible requirements by which they can guide their conduct; and the full scope of these requirements must be obvious to every prudent employer upon a reading of the standard.

Presenting employers with a quicksilver of standards, such as those described here, cannot save a limb and will not save a life.

Indeed, such standards may serve to delay improvements in job safety and health conditions, as puzzled employers either await clarification of what is expected of them or think they are presently doing all that such standards require.

So long as job safety and health standards remain shrouded in ambiguity, the gains we make in safety and health conditions on the job will be equally ambiguous.



CANVAS & GLASS CLOTH

1ST — BY ANY MEASURE

Chas. Harmon & Company, Inc.

1175 NE 125th St., No. Miami, Fla. 33161 (305) 894-4120

DIRECT TELETYPE TO OUR MILLS SHIPPED BY TRUCK

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. 6 No. 2

Summer 1974

Court of Appeals Orders Review of Asbestos Standard

Commissioner in a historic decision on April 15, 1974, the U.S. Court of Appeals for the District of Columbia ordered the Secretary of Labor to review portions of the Asbestos Standard promulgated on June 7, 1972. The ruling, written by Circuit Judge McGowan, was in response to a petition filed by the AFL-CIO urging reversal of the existing standard.

The Court ruling, which was rendered in a forty-one page decision, contains the following provisions applicable to insulation work:

In those industries where a dust level of two fibers/ml is feasible, it should be implemented before 1976. Here, the court took note of testimony of Duncan Holaday of the I.H.R.P., industry witnesses and others that a two fiber standard could be implemented in commercial and industrial insulation work within two years (of April, 1972).

(Continued on fourth page)



Dr. Irving J. Selikoff, Director of the Insulation Industry Hygiene Research Program, answers questions regarding health effects of asbestos in discussions with Local 93 members David Patterson, Mario Di Rocco, Richard Younkman, Thomas Hughes, Thomas Smith, William Frazier, Edward Cisek and Mike Hamsworth.

Walter Hanna, Business Agent of Local 93, provides Dr. Henry Anderson of Mount Sinai with details of his past medical history.

Local 93 Exams Show Continuing Shipyard Problems

Examinations of Local 93 (Philadelphia Naval Shipyard) of the International Association of Heat and Frost Insulators and Asbestos Workers conducted by staff physicians of the Mount Sinai School of Medicine reveal asbestos problems still exist in shipyard work.

While much insulation material now has no asbestos content and the use of asbestos is required to be much better controlled, asbestos material in use by other trades poses a continuing problem. Here, asbestos cement and dust

(Continued on third page)



Insulation Hygiene Progress Reports

Vol. 6, No. 2

Summer 1974

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,
N.Y. 10029

Advisory Council of IHRP

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

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

Andrew Haas, General President, International
Association of Heat and Frost Insulators and As-
bestos Workers, Washington, D.C.

Fred L. Pundsack, Ph.D., Vice President, Re-
search and Development, Johns-Manville Cor-
poration, Denver, Colo.

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

Dust Control Important in Alaskan Pipeline Work

Asbestos Workers from all parts of the United States will soon begin work insulating approximately 400 miles of the 48-inch diameter Alaskan pipeline. Additional insulation work will be required in pumping stations and tank farms. The work will commence this summer and continue for three years.

The insulation material to be used on the pipe will either be fibrous glass or rigid polyurethane foam. Little or no asbestos-containing materials are called for in the specifications.

While asbestos is not to be used, each of the two materials contemplated for use has been shown to produce cancer in animals. Because of the remoteness of operations, the extreme weather and working conditions, and the urgency to complete the job, special efforts are planned to assure that adequate precautions are taken to protect the health of insulators.

All of the procedures appropriate for dust control in asbestos work should be applied here—exhaust ventilation on all portable and stationary power tools, down draft cutting tables for hand saws, adequate clean-up procedures in fabrication shops, and use of disposable respirators, if warranted.

The possibility that dust from polyurethane foam insulation might be hazardous was discussed previously in Vol. 4, No. 2 of IHRP. In view of the possible extensive use of this material for insulating the pipeline, it is appropriate to review the available information on its possible health effects.

Workers who are sawing or abrading this material may be exposed to plastic dusts, dust from added fire retardants, dust from reinforcing materials, gases from unreacted TDI or MDI (See Vol. 5, No. 4) trapped in the insulation, and a mixture of decomposition products produced by heat from cutting or abrading operations.

No studies have been reported on effects on humans exposed to dusts from polyurethane insulation. However, the Institute of Environmental Medicine at New York University has conducted animal experiments which were designed to duplicate conditions of use.

Two groups of rats were exposed for

30 days to dusts and gases produced in grinding polyurethane insulation. In the low exposure group, the atmospheric concentration of dust was 10 milligrams per cubic meter (mg/m^3) and for the higher group it was 100 mg/m^3 . The Threshold Limit Value for "nuisance dusts" is 10 mg/m^3 . The "low" group was exposed to about one-third and the "high" group to about twice the dust concentration which is considered acceptable for long term, daily, occupational exposures.

Considering the brief exposure time and the relatively low dust concentrations, the effects on the animals were disturbing. One rat out of 39 in the lower exposure group and 9 out of 45 in the higher group developed emphysema. In addition, one lung cancer was found in each group, and one liver cancer in the "low" group.

The investigators concluded that polyurethane insulating materials must be considered a serious industrial health hazard.

In a 1972 publication by Dr. Meun Stanton of the National Cancer Institute it was shown that fibrous glass and other inorganic fibers could produce mesothelioma when implanted into the pleura of rats. Subsequent investigations by the N.C.I. scientists have confirmed these results and a detailed description of their work was presented at the Lyon, France, Conference on the Biological Effects of Asbestos.

They concluded that the carcinogenicity of asbestos and fibrous glass (in their animal experiments) appeared primarily related to the structural shape of the materials, rather than to their physiochemical properties.

Of special concern here are fibers of a diameter less than 3-5 microns that may be inhaled and deposited in the lower spaces of the lung.

In commenting on the use of either of these materials on the Alaskan pipeline, Dr. Selikoff, Director of the I.I.H.R.P., stated, "We have learned the techniques and engineering controls that will allow asbestos to be used safely. These should be applied with equal vigor to the use of rigid polyurethane and fibrous glass."