

MINUTES OF SPECIAL MEETING
OF THE
BOARD OF DIRECTORS
OF
THORPE INSULATION COMPANY

A special meeting of the Board of Directors of THORPE INSULATION COMPANY ("Company"), a Texas corporation, was held at the corporate offices of J. T. Thorpe Company in Houston, Texas, at 10:00 a.m., November 17, 1972, pursuant to notices. The Secretary of the Company was directed to file copies of the notices of the meeting with the minutes of this meeting.

A. L. Erickson called the meeting to order. Directors of the Company present were:

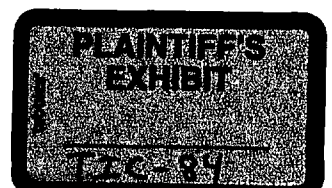
A. L. Erickson
Frank C. Sheldon, Jr.
W. D. Leonard
M. P. Proctor
J. S. Peiffer

Mr. Erickson declared a quorum of Directors was present.

Upon motion duly made and seconded, A. L. Erickson was unanimously designated Chairman of the meeting and Frank C. Sheldon, Jr. was unanimously designated Secretary of the meeting.

The minutes of the last meeting of the Board of Directors were read and unanimously approved.

Mr. Sheldon presented a projection of the earnings of the Company through December 31, 1972, which was then discussed by the Directors.



There was a discussion concerning the acceleration of retirement of the Company's mortgage indebtedness on its Corpus Christi property. After discussion, the following resolution was duly adopted unanimously:

RESOLVED, That the proper officers of this Company be and they are hereby authorized and directed to prepay any portion of the mortgage indebtedness on the Corpus Christi facilities, so long as said prepayment does not involve any prepayment penalty under the terms and provisions of the mortgage.

Upon motion duly made and seconded, the following resolution was duly adopted unanimously:

RESOLVED, That the President and Treasurer of this corporation in consultation with the Company's auditors be and they are hereby authorized and directed to determine at the close of the Company's fiscal year whether the net profits of the Company are sufficient to enable the Company to declare a cash bonus to the eligible employees under the Company's Bonus Plan, and if they find, upon such determination, that there are sufficient net profits to declare such a bonus, they are hereby authorized and directed to determine the amount to be paid to the eligible employees under the Bonus Plan and to make such payments accordingly.

Upon motion duly made and seconded, the following resolution was duly adopted unanimously:

RESOLVED, That \$2,000 be set aside for a Christmas bonus for key field employees of the corporation and that the amount be allocated to such employees by Frank C. Sheldon, Jr. and W. D. Leonard in such proportions as they deem fit.

After discussion of the Company's contribution to Thorpe Insulation Company Employees' Profit Sharing Trust

Agreement, the following resolutions were duly adopted unanimously:

RESOLVED, That the Company contribute to its Profit Sharing Plan for the fiscal year ended December 31, 1972, an amount equal to 10 percent of Annual Compensation as that term is defined in Section 2.01(h) of said Profit Sharing Trust Agreement;

FURTHER RESOLVED, That the proper officers of the Company be and they are hereby authorized and directed to disburse funds of the Company pursuant to the terms of the foregoing resolution within the time limitations of the Internal Revenue Code for corporations on the accrual method of accounting; and be it

FURTHER RESOLVED, That the proper officers of the Company be and they are hereby authorized and directed to post on or before December 31, 1972 an announcement of the action of this Board of Directors authorizing the above contribution to the Profit Sharing Plan; said posting to be in a conspicuous location calculated to advise the employees of the Company of said contribution.

Upon motion duly made and seconded, the following resolution was adopted unanimously:

RESOLVED, That cash dividends be paid to the shareholders of the Company as follows:

<u>Per Share Amount of Cash Dividends</u>	<u>Record Date of Shareholders Entitled to Dividends</u>	<u>Payment Date</u>
1.00	March 31, 1973	April 30, 1973
1.00	June 30, 1973	July 31, 1973
1.00	September 30, 1973	October 30, 1973
1.00	December 31, 1973	December 31, 1973

provided, however, that no cash dividends will be paid to the Shareholders of the Company at a

particular Payment Date specified above, if for the calendar quarterly period immediately preceding the Payment Date of the cash dividends, the Company had no net profits after taxes for such quarterly period.

There was a discussion concerning the purchase of additional properties contiguous to the present facilities in Corpus Christi, Texas. After discussion, the following resolution was duly adopted unanimously:

RESOLVED, That W. D. Leonard be and he is hereby authorized and directed to acquire Lots 7 and 8 of Block 6 of Section 2 of the Navigation Industrial Park, Corpus Christi, Texas, for a total consideration of \$23,822.38, exclusive of closing cost, said purchase to take place on or after January 1, 1973; and be it

FURTHER RESOLVED, That the proper officers of the Company be and they are hereby authorized and directed to execute and deliver any and all documents and to do all other things that they deem necessary or appropriate to effectuate the purposes of the foregoing resolution.

There was a discussion concerning the opening of a branch office in San Antonio, Texas. After discussion, the following resolution was duly adopted unanimously:

RESOLVED, That the proper officers of the Company be and they are hereby authorized and directed to open up a branch office of the Company in San Antonio, Texas and to do all things necessary or appropriate in connection therewith; and be it

FURTHER RESOLVED, That Messrs. Sheldon and Proctor be and they are hereby authorized and directed to notify Johns-Manville Company of the decision of this board concerning the San Antonio branch office.

There was an extended discussion concerning "Asbestosis", a malady involving scarring of the lungs, and the necessity of compliance with the recently passed Federal Occupational Safety and Health Act ("OSHA"). In this regard, Mr. M. P. Proctor presented a Proposed Compliance Procedure for Thorpe Products Company Asbestos Dust. This presentation included an outline of steps that have been taken and proposed methods for future compliance with current OSHA Asbestos Dust Standards for Thorpe Products Company, and the Proposal was distributed to each Director. After the Proposal was reviewed in detail by the Directors and discussed by them at length, the following resolution was duly adopted unanimously:

RESOLVED, That the Proposed OSHA Compliance Procedure for Thorpe Products Company Asbestos Dust be and the same is hereby adopted as the expressed policies and procedures of this corporation, which Proposal report is to be made a part of these minutes; and be it

FURTHER RESOLVED, That the proper officers of this Company be, and they are hereby authorized and directed to do all things necessary and proper to carry out the Proposed Compliance Procedures in order to protect the health of all personnel of Thorpe Insulation Company, and to maintain a constant vigilance regarding their working conditions and providing them with the best equipment available.

Mr. Jack Peiffer then presented a Progress Implementation of 1971 Federal Occupational Safety and Health Act in

J. T. Thorpe Company contract operations. The Progress Report was distributed to each Director and after thorough examination and extended discussion thereof, the following resolutions were duly adopted unanimously:

RESOLVED, That the Progress Report on the implementation of the 1971 Federal Occupational Safety and Health Act in J. T. Thorpe Company contract operations be and the same is hereby adopted as the practices, procedures and policies of this Corporation; be given immediate attention of all appropriate personnel; and be made a part of these minutes; and be it

FURTHER RESOLVED, That the proper officers of this Corporation be and they are hereby authorized and directed to implement the policies and procedures described in said Progress Report.

There was a discussion concerning implementing the policies and practices recommended by Messrs. Proctor and Peiffer. After discussion, the following resolution was duly adopted unanimously:

RESOLVED, That the proper officers of the Company as soon as practicable be and they are hereby authorized and directed to convene a meeting of supervisors and field personnel of the Company for the purpose of apprising all persons of the requirements of the law and of the Company's policies and practices in implementation of such law.

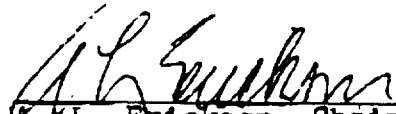
There was a discussion concerning compliance with the letter and spirit of the Civil Rights Acts regarding equal employment opportunities for all persons irrespective of race, creed, color or origin. After discussion, the following resolution was duly adopted unanimously:

RESOLVED, That the proper officers and personnel of the Company be and they are hereby directed to comply with all provisions of Federal Civil Rights Acts relating to equal employment opportunities for all persons.

There was a discussion concerning membership in the National Insulation Contractors Association. After discussion, the following resolution was duly adopted unanimously:

RESOLVED, That W. D. Leonard be and he is hereby authorized and directed to investigate the feasibility of joining the National Insulation Contractors Association without being associated with the Southwest Insulation Contractors Association.

There being no further business to come before the Board, it was unanimously voted to adjourn.


A. L. Erickson, Chairman

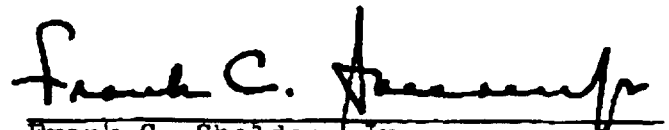
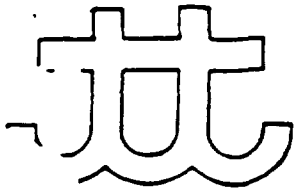

Frank C. Sheldon, Jr.

EXHIBIT "A"



T H O R P E

OFFICE CORRESPONDENCE



FROM M. P. Proctor

DATE November 10, 1972

TO Board of Directors
J T THORPE COMPANY

SUBJECT Proposed OSHA Compliance
Procedure for Thorpe Products
Company Asbestos Dust

We are setting out below steps that have been taken and proposed methods for future compliance with current OSHA Asbestos-Dust Standards.

Standard effective July 7, 1972

The 8 hour time-weighted average airborne concentration of asbestos fibers to which any employee may be exposed shall not exceed five fibers, longer than 5 micrometers, per cubic centimeter of air.

METHODS OF COMPLIANCE

I. Engineering Controls

Our fabrication shop has an effective dust collection system carefully maintained. In addition, we have added booster collectors to saws which cut asbestos containing materials.

The warehouse floors are vacuumed daily to remove loose fibers. Rail cars are vacuumed periodically as they are being unloaded. Delivery vans are vacuumed daily.

II. Personal Protective Equipment

A. Air purifying respirators

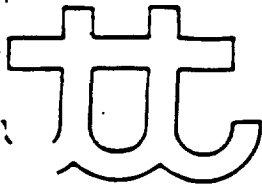
Approved respirators are provided each warehouse and shop employee. These are carried during working hours. They are worn when the following duties are performed and when Engineering Controls are not possible.

1. Unloading or loading rail cars.
2. Unloading or loading delivery vehicles.
3. Repackaging
4. Cutting

NOTE:

Wearing of respirators will be required until we have documentary proof of compliance.

continued.....



THORPE

OFFICE CORRESPONDENCE



FROM

DATE

TO

SUBJECT

Page 2

II. Personal Protective Equipment (Cont'd)

- B. Special Clothing - Does not apply.
- C. Change Rooms - Does not apply.
- D. Laundering - Does not apply.

NOTE:

B, C & D not required unless exposure limits are exceeded.

III. Monitoring

A. Personal monitoring

We have purchased a Micronaire air sampler No. 3900-10 produced by the Bendix Corporation and carrying OSHA Approval No. 1A-102. Dust collection Filters are as produced by Millipore Corporation Aerosol Cat. No. MAWP 037A0. An Aerosol Adapter No. XX6200004 is necessary for use with the Micronaire sampler.

Personal samples will be taken from those employees exposed to asbestos materials. Sampling frequency will be at least once each six months.

B. Environmental monitoring

Same as for personal monitoring but sampler will remain stationary at work station for full eight hours. All work stations with asbestos exposure will be monitored at least once each six months.

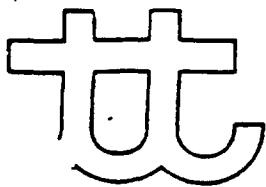
NOTE:

Dust Analysis will be done by J-M Industrial Hygiene Engineering Services Division.

IV. Caution Labeling

- A. Repackaging and Fabricated Materials are marked with Caution label containing exact label specifications as set out in OSHA Standard.

continued.....



T H O R P E

OFFICE CORRESPONDENCE



FROM

DATE

TO

SUBJECT

Page 3

IV. Caution Labeling (Cont'd)

- B. Waste Disposal - all waste is sealed in impermeable bags and tagged with caution label.

V. Record Keeping

- A. All monitoring records will be maintained for a period of three years.
- B. Each employee will have access to his personal record upon request.
- C. Any employee found to be in excess of exposure limits will be notified in writing within 5 days of the finding.

VI. Medical Examinations

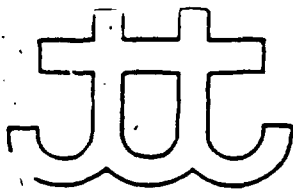
- A. Each warehouse and shop employee exposed to asbestos dust will be given a medical examination in accordance with OSHA requirements prior to January 31st, 1973 and annually thereafter.
- B. New employees will be examined within 30 days of employment.
- C. A medical examination will be made available to any employee within 30 days of termination.
- D. Medical records will be maintained for 20 years.
- E. Access to these records will be available to OSHA, NIOSH and to the employee or former employee.

Comment:

We believe that we have taken steps as required by the law and in some instances beyond those required by the law to insure that our employees have a healthy atmosphere in which to work.

We believe that we are in full compliance with the law and have no dust exposures which exceed the standard. We will prove this with monitoring and our first complete analysis will be available prior to January 6th, 1973.

continued.....



T H O R P E



OFFICE CORRESPONDENCE

FROM

DATE

TO

SUBJECT

Page 4

The obvious long term solution is to eliminate asbestos fiber containing materials from our warehouses. We expect to do this by December, 1973. ✓

THORPE PRODUCTS COMPANY

M. P. Proctor

MPP:pb

EXHIBIT "B"

J T THORPE COMPANY

E N G I N E E R S - C O N S T R U C T O R S

REFRACTORY, INSULATED AND ACID PROOF STRUCTURES

P. O. BOX 33399

(713) 644-1247

HOUSTON, TEXAS 77033

November 16, 1972

Mr. F. C. Sheldon, Jr., Director
Board of Directors
J T Thorpe Company
6833 Kirbyville Street
Houston, Texas

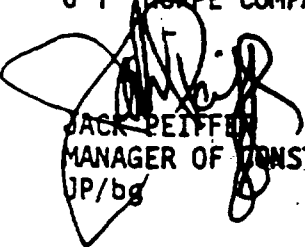
PROGRESS REPORT ON IMPLEMENTATION OF 1971 FEDERAL OCCUPATIONAL SAFETY & HEALTH ACT

At the request of Mr. F. C. Sheldon, Jr., a report has been prepared to outline our efforts thus far to comply with the Federal Occupational Safety & Health Act of 1971, and the work remaining to be done in this area.

The attached report is in four parts. The first outlines in general the major areas of impact of the law on J T Thorpe Company's contract operations. This is followed by our overall plan for implementation of the law and the steps we have taken thus far. Finally, we have outlined the work remaining to be done with particular emphasis of the year 1973.

Please advise if you have any specific questions on the foregoing, or wish to have any additional specific information.

J T THORPE COMPANY



JACK PEIFFER
MANAGER OF CONSTRUCTION
JP/bg

PROGRESS REPORT
IMPLEMENTATION OF 1971 FEDERAL OCCUPATIONAL SAFETY & HEALTH ACT
IN
J T THORPE COMPANY CONTRACT OPERATIONS

NOVEMBER, 1972

I. Major Areas of Impact

Physical Facilities

Jobsite Practices

Field Labor Productivity

Contract Profitability & Estimating Procedures

Type of Work & Materials Used

As you are aware, OSHA announced two programs at the outset, a target industries program and a target health hazards program.

- The target industries program was to concern itself with the five top injury prone industries; longshoring, roofing and sheetmetal, meat and wood products, lumber and wood products, and miscellaneous transportation equipment. We, of course, perform sheetmetal work although probably not in the sense that OSHA was zeroing in on. Their target health hazards program included lead, carbon monoxide, silica, asbestos and cotton dust. We, of course, are very much involved in the asbestos problem as has previously been outlined to you Mr. M. P. Proctor in his compliance procedures for Thorpe Products Company. In addition, certain of our operations put us in direct contact with the silica health hazard. In the very near future, we will be developing a detailed program to combat these latter two hazards in our field operations on a broad scale. We also anticipate the construction industry will become one of OSHA'S prime targets in the very near future.

The potential impact of the law is so great, it is difficult or nearly impossible to instantaneously implement all aspects of the law. Accordingly, our approach has been to make a beginning on a broad basis, correct immediate and obvious violations of the Act, undertake an educational program for our employees, and develop a plan for the longrange.

Mentioned above were five areas of our activities where we anticipate significant change or effects due to the new Law. Physical facilities are the most obvious and the most easily inspected, and certain efforts and expenditures have been and will be undertaken to bring our warehouses and offices into compliance with the Law. As time progresses, and the Act becomes fully implemented in the construction industry, certain practices that have prevailed in the past on construction jobs will no longer be permitted, as indeed some of our past practices have already been changed or prohibited. Hand-in-hand with this implementation of the Law, will be a potential affect on field labor productivity. In some instances, productivity may actually increase due to improved working conditions. However, the effort and expense required to bring about this condition may adversely affect contract profitability. To account for this eventuality, we will need to maintain a close watch over contract costs and possibly modify our estimating

Procedures to account for this impact. You are certainly aware of the asbestos problem, and thus the materials we use in our work will be affected, and we may even need to reconsider the types of work we are now engaged in. On the brighter side of this picture, we feel companies such as Thorpe that are intending fully to comply with the law and are cognizant of its requirements, will have their services in greater demand in the coming years.

II. Overall Plan For Implementation Of The Law In Thorpe Contract Operations.

Our plan to implement compliance can be simply stated: Comply with the Law in all aspects. However, as mentioned previously, the scope of the law is so broad and its effects so far reaching, that it is virtually impossible for a company of our size to effect overnight total compliance. Accordingly, we have pursued a rather informal plan thus far which has consisted of taking the immediate necessary steps to bring about compliance in our operations, particularly in areas that have been well publicized and are the more obvious items. For the longer range, we are beginning to develop specific policies in certain areas such as environmental testing, personnel training, and facilities modifications. Also required will be reminders of the importance of certain items which need to be followed on a day-to-day basis, and tend to be forgotten with the passage of time. As we continue to approach complete compliance

with the existing law, we will also need to implement the new standards as promulgated by the Federal Government and State Agencies.

One of the most publicized problems with the new law has been the difficulty of small companies, and companies the size of Thorpe to familiarize themselves with the many facets of the law and bring about compliance. We feel this is a very real problem and have exerted considerable effort toward this end. Where the real problem exists in our organization to a greater degree is in our branch office locations and subsidiary company locations. To combat this problem, we will endeavor to keep the supervisory personnel in those locations abreast of new developments and policies as they are available.

III. Actions Taken To Date To Bring About Compliance With The Law

This section of our report will consist of a listing of most of the more significant things done thus far, with a following elaboration on certain items and examples.

1. Program of Memorandums
2. Supervisors Meeting
3. Review of physical facilities

4. Re-emphasis of Certain Aspects of The Wage & Hour Laws
In Light of The OSHA Act.
5. Respirators
6. Safety Glasses & Shoes
7. Back-up Warning Signals For Vehicles
8. Posting of Law In Tool Boxes
9. OSHA Forms Attached To Work Orders
10. Record Keeping
11. Accounting Charge Numbers
12. Accounting of Expendable Supplies
13. B N A Occupational Safety & Health Reporter
14. New Style First Aid Kits
15. Selection of a Consulting Physician and Safety Equipment
Consultant.

The first item listed, a program of memorandums was part of our educational effort to acquaint Thorpe personnel with various parts of the law effecting their normal duties. These were numbered as transmittals and issued on a time basis, particularly those affecting field superintendents or on an as needed basis. We have furnished you with copies of all of these transmittals if you have not previously received them. In addition, you will find there is

an index showing the employee and office and the transmittals each has received. These are shown as Exhibit I.

On June 23, 1972 we held our annual Supervisors Meeting at the Hotel Sonesta in Houston. This is ordinarily a meeting confined to field and office supervisory personnel. However, this year the meeting was expanded to include certain other employees, particularly warehouse personnel who are daily involved with requirements of the OSHA Act. The main thrust of the meeting this year was concerning the OSHA Act and a substantial portion of the program was handled by our workmen's compensation carrier, Liberty Mutual Insurance Company. A copy of the announcement of this meeting and the agenda is included as Exhibit II.

We conducted a review of our warehouse facilities in Houston accompanied by Liberty Mutual industrial hygiene experts and their loss prevention personnel to determine potential violations of the OSHA Act. Subsequent to this, OSHA Transmittal #23 from our program of memorandums was sent out to all Warehouse Supervisors asking them to check specific portions of our warehouses for detailed compliance with the Act. As an outgrowth of these inspections, we have prepared certain engineering drawings for new steel stairways and platforms and will shortly be installing these along with modi-

fications to handrails and other items. As is usual on many electrical circuit breaker boxes, some of ours were taped to avoid being turned off at the end of the day and taping of these circuit breakers was noted as a violation of the law since it prohibits the circuit breakers from performing their normal function. Gasoline pump areas were equipped with danger signs, and numerous other improvements or changes have already been accomplished. These changes and potential violations were discussed in detail in the Minutes of the Fifteenth Meeting of The Operating Committee, dated March 28, 1972.

With the increased emphasis on safety and the requirements of the OSHA Law, Thorpe's Houston Manager of Construction attended a Wage & Hour Law Seminar sponsored by the A.G.C. & Department of Labor and issued a memorandum to field superintendents on July 18, 1972, which is self-explanatory. A copy of this memorandum is attached as Exhibit III.

An investigation was made of the type dust and material particles our employees would likely be subjected to inhaling and a new type respirator was purchased for these environments. Details of this respirator, Safeline 5441, are given on data sheets attached as Exhibit IV.

We instituted as Thorpe Company policy, the wearing of safety-toed shoes and safety glasses effective April 28, 1972. This was outlined in OSHA Transmittal #4 and also #5 in our program of memorandums. Further, we made arrangements with a safety shoe distributor here in Houston to visit our jobs and provide a convenient means for employees to purchase safety shoes. We set-up a continuing program with Texas State Optical Company to provide permanent Thorpe field employees with safety glasses at company expense. Exhibit V is an example of the authorization form given to employees by Thorpe superintendents.

One of the hazards in construction is vehicles backing over employees accidentally on jobsites. We have tested a back-up device on one of our large contract department trucks, and this appears to be a satisfactory mechanical means of providing a warning when the truck is backing. We have decided that vehicles such as our large jobsite forklifts would not require this since visibility is almost complete from the forklifts while backing, and where a continual backing situation persists during the day, this could be a considerable employee irritant. In the very near future, all of our contract delivery trucks will be equipped with these back-up warning devices.

One of the requirements of the OSHA Act is posting of the most pertinent facts of the law regarding inspections and violations. We have had this wording prepared on permanent type posters and attached them to the inside lid of all Thorpe tool boxes. Since many of our jobs are small and do not have permanent type bulletin boards, we felt this would be the most satisfactory means of complying with the law. Normally during fair weather, the tool box lids remain open during the day and all employees should have ample opportunity to become aware of the features of the law.

As discussed, OSHA Form 100 is attached to the Work Order on significant jobs with the customer's name, the job location, etc., filled in for the superintendent. A sample from a recent work order is attached as Exhibit VI. On smaller jobs, all superintendents have earlier been given a folder in which to keep their OSHA transmittals and in the back is a pocket with a supply of OSHA Forms they can fill in as required.

Record keeping as required by the law is outlined in Transmittal #1, #2, and #3 in our program of memorandums.

We anticipate significant expenditures in the future to comply with the law and have asked our Accounting Department to assign charge

numbers for certain categories of anticipated expenditures.

These are as outlined on an interoffice memo, a copy of which is attached and enclosed as Exhibit VII.

In the past, we have charged tool repairs and expendable items used in our contract operations to what we refer to as a 250 account. With the advent of the OSHA Law, we can anticipate personnel safety equipment and other expendable costs increasing rather dramatically. Accordingly, we have set up a new account for these items and now call this a 251 account. All items purchased for this purpose are as listed on the attached list shown as Exhibit VIII.

Mentioned earlier was the difficulty encountered by small and medium companies in keeping abreast of the law. To assist us in this end we have subscribed to the B N A Occupational Safety & Health Reporter. This will be available and exhibited to you during your current meetings.

One of the requirements of the law is that firstaid kits be equipped with individually packaged supplies, that once opened are not re-used. Accordingly, we have investigated this requirement and have now standardized on the Medical Supply Company kit which will also be

available for your inspection during these meetings. This firstaid kit has received the approval of our Consulting Physician.

In investigating many of these new products and complying with the health requirements of the law, we have found thus far, that the services of a physician and a good personnel safety equipment company is essential. We anticipate continuing the use of these expert services.

IV. Additional Work To Be Done To Fully Implement The Terms of The OSHA Act In Thorpe Operations.

Much remains yet to be done to place our company in full compliance with the OSHA Act. With regard to field operations, both our refractory and insulators will continue to be exposed to asbestos dust in the years to come on maintenance work. To this end, we will necessarily have to develop a testing program for measuring dust concentrations and a procedure for complying with the new regulations regarding medical examinations. Since this will be effective in January, 1973, this program will be developed in December of this year. Further, the National Institute of Occupational Safety & Health (NIOSH) will be continually formulating new standards. One of these looming significantly on the horizon is the heat exposure

standards. This could have a significant effect on our operations and is being studied by us.

Preliminary plans have been made for a supervisors meeting for the Thorpe Insulation Company personnel in Corpus Christi. This upcoming supervisors meeting, which we anticipate holding in the early part of the first quarter of 1973, will follow a similar format to that held in Houston in June of this year.

Attached as Exhibit IX is a copy of a recent publication of the Research Institute Service to which we subscribe. It outlines the 25 most common violations of the OSHA Act drawing citations. Almost without exception, these have been covered in our program of memorandums and was part of the aim of that program. 1973 will be see a significant effort on our part to review and keep uppermost in our superintendent's mind the need to comply with the law and avoid violating these portions of the Act.

As always, we will necessarily keep a close eye on the cost of complying with the new law, and may find it necessary in the future to charge a fee such as a percent of labor or some other charge to account for increasing costs on work performed for customers, particularly on cost plus work.

Since it has always been Thorpe's policy to work safely, many of the features of the new law merely constitutes "fine tuning" of our safety program. Other facets of the law signify a significant change in past practices. To this end, we plan to re-write our standard company safety rules and distribute them to our field forces. We also anticipate the need to develop some sort of continuing education program for our field personnel to enable them to work not only safely but in compliance with the law.

PROGRESS REPORT
IMPLEMENTATION OF 1971 FEDERAL OCCUPATIONAL SAFETY & HEALTH ACT
IN
J T THORPE COMPANY CONTRACT OPERATIONS

NOVEMBER, 1972

I. Major Areas of Impact

Physical Facilities

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Contract Profitability & Estimating Procedures

Type of Work & Materials Used

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Procedures to account for this impact. You are certainly aware of the asbestos problem, and thus the materials we use in our work will be affected, and we may even need to reconsider the types of work we are now engaged in. On the brighter side of this picture, we feel companies such as Thorpe that are intending fully to comply with the law and are cognizant of its requirements, will have their services in greater demand in the coming years.

II. Overall Plan For Implementation Of The Law In Thorpe Contract Operations.

Our plan to implement compliance can be simply stated: Comply with the Law in all aspects. However, as mentioned previously, the scope of the law is so broad and its effects so far reaching, that it is virtually impossible for a company of our size to effect overnight total compliance. Accordingly, we have pursued a rather informal plan thus far which has consisted of taking the immediate necessary steps to bring about compliance in our operations, particularly in areas that have been well publicized and are the more obvious items. For the longer range, we are beginning to develop specific policies in certain areas such as environmental testing, personnel training, and facilities modifications. Also required will be reminders of the importance of certain items which need to be followed on a day-to-day basis, and tend to be forgotten with the passage of time. As we continue to approach complete compliance

with the existing law, we will also need to implement the new standards as promulgated by the Federal Government and State Agencies.

One of the most publicized problems with the new law has been the difficulty of small companies, and companies the size of Thorpe to familiarize themselves with the many facets of the law and bring about compliance. We feel this is a very real problem and have exerted considerable effort toward this end. Where the real problem exists in our organization to a greater degree is in our branch office locations and subsidiary company locations. To combat this problem, we will endeavor to keep the supervisory personnel in those locations abreast of new developments and policies as they are available.

III. Actions Taken To Date To Bring About Compliance With The Law

This section of our report will consist of a listing of most of the more significant things done thus far, with a following elaboration on certain items and examples.

1. Program of Memorandums
2. Supervisors Meeting
3. Review of physical facilities

4. Re-emphasis of Certain Aspects of The Wage & Hour Laws
In Light of The OSHA Act.
5. Respirators
6. Safety Glasses & Shoes
7. Back-up Warning Signals For Vehicles
8. Posting of Law In Tool Boxes
9. OSHA Forms Attached To Work Orders
10. Record Keeping
11. Accounting Charge Numbers
12. Accounting of Expendable Supplies
13. B N A Occupational Safety & Health Reporter
14. New Style First Aid Kits
15. Selection of a Consulting Physician and Safety Equipment
Consultant.

The first item listed, a program of memorandums was part of our educational effort to acquaint Thorpe personnel with various parts of the law effecting their normal duties. These were numbered as transmittals and issued on a time basis, particularly those affecting field superintendents or on an as needed basis. We have furnished you with copies of all of these transmittals if you have not previously received them. In addition, you will find there is

an index showing the employee and office and the transmittals each has received. These are shown as Exhibit I.

On June 23, 1972 we held our annual Supervisors Meeting at the Hotel Sonesta in Houston. This is ordinarily a meeting confined to field and office supervisory personnel. However, this year the meeting was expanded to include certain other employees, particularly warehouse personnel who are daily involved with requirements of the OSHA Act. The main thrust of the meeting this year was concerning the OSHA Act and a substantial portion of the program was handled by our workmen's compensation carrier, Liberty Mutual Insurance Company. A copy of the announcement of this meeting and the agenda is included as Exhibit II.

We conducted a review of our warehouse facilities in Houston accompanied by Liberty Mutual industrial hygiene experts and their loss prevention personnel to determine potential violations of the OSHA Act. Subsequent to this, OSHA Transmittal #23 from our program of memorandums was sent out to all Warehouse Supervisors asking them to check specific portions of our warehouses for detailed compliance with the Act. As an outgrowth of these inspections, we have prepared certain engineering drawings for new steel stairways and platforms and will shortly be installing these along with modi-

fications to handrails and other items. As is usual on many electrical circuit breaker boxes, some of ours were taped to - avoid being turned off at the end of the day and taping of these circuit breakers was noted as a violation of the law since it prohibits the circuit breakers from performing their normal function. Gasoline pump areas were equipped with danger signs, and numerous other improvements or changes have already been accomplished. These changes and potential violations were discussed in detail in the Minutes of the Fifteenth Meeting of The Operating Committee, dated March 28, 1972.

With the increased emphasis on safety and the requirements of the OSHA Law, Thorpe's Houston Manager of Construction attended a Wage & Hour Law Seminar sponsored by the A.G.C. & Department of Labor and issued a memorandum to field superintendents on July 18, 1972, which is self-explanatory. A copy of this memorandum is attached as Exhibit III.

An investigation was made of the type dust and material particles our employees would likely be subjected to inhaling and a new type respirator was purchased for these environments. Details of this respirator, Safeline 5441, are given on data sheets attached as Exhibit IV.

We instituted as Thorpe Company policy, the wearing of safety-toed shoes and safety glasses effective April 28, 1972. This was outlined in OSHA Transmittal #4 and also #5 in our program of memorandums. Further, we made arrangements with a safety shoe distributor here in Houston to visit our jobs and provide a convenient means for employees to purchase safety shoes. We set-up a continuing program with Texas State Optical Company to provide permanent Thorpe field employees with safety glasses at company expense. Exhibit V is an example of the authorization form given to employees by Thorpe superintendents.

One of the hazards in construction is vehicles backing over employees accidentally on jobsites. We have tested a back-up device on one of our large contract department trucks, and this appears to be a satisfactory mechanical means of providing a warning when the truck is backing. We have decided that vehicles such as our large jobsite forklifts would not require this since visibility is almost complete from the forklifts while backing, and where a continual backing situation persists during the day, this could be a considerable employee irritant. In the very near future, all of our contract delivery trucks will be equipped with these back-up warning devices.

One of the requirements of the OSHA Act is posting of the most pertinent facts of the law regarding inspections and violations.

- We have had this wording prepared on permanent type posters and attached them to the inside lid of all Thorpe tool boxes. Since many of our jobs are small and do not have permanent type bulletin boards, we felt this would be the most satisfactory means of complying with the law. Normally during fair weather, the tool box lids remain open during the day and all employees should have ample opportunity to become aware of the features of the law.

As discussed, OSHA Form 100 is attached to the Work Order on significant jobs with the customer's name, the job location, etc., filled in for the superintendent. A sample from a recent work order is attached as Exhibit VI. On smaller jobs, all superintendents have earlier been given a folder in which to keep their OSHA transmittals and in the back is a pocket with a supply of OSHA Forms they can fill in as required.

Record keeping as required by the law is outlined in Transmittal #1, #2, and #3 in our program of memorandums.

We anticipate significant expenditures in the future to comply with the law and have asked our Accounting Department to assign charge

numbers for certain categories of anticipated expenditures.

These are as outlined on an interoffice memo, a copy of which is attached and enclosed as Exhibit VII.

In the past, we have charged tool repairs and expendable items used in our contract operations to what we refer to as a 250 account. With the advent of the OSHA Law, we can anticipate personnel safety equipment and other expendable costs increasing rather dramatically. Accordingly, we have set up a new account for these items and now call this a 251 account. All items purchased for this purpose are as listed on the attached list shown as Exhibit VIII.

Mentioned earlier was the difficulty encountered by small and medium companies in keeping abreast of the law. To assist us in this end we have subscribed to the B N A Occupational Safety & Health Reporter. This will be available and exhibited to you during your current meetings.

One of the requirements of the law is that firstaid kits be equipped with individually packaged supplies, that once opened are not re-used. Accordingly, we have investigated this requirement and have now standardized on the Medical Supply Company kit which will also be

available for your inspection during these meetings. This firstaid kit has received the approval of our Consulting Physician.

In investigating many of these new products and complying with the health requirements of the law, we have found thus far, that the services of a physician and a good personnel safety equipment company is essential. We anticipate continuing the use of these expert services.

IV. Additional Work To Be Done To Fully Implement The Terms of The OSHA Act In Thorpe Operations.

Much remains yet to be done to place our company in full compliance with the OSHA Act. With regard to field operations, both our refractory and insulators will continue to be exposed to asbestos dust in the years to come on maintenance work. To this end, we will necessarily have to develop a testing program for measuring dust concentrations and a procedure for complying with the new regulations regarding medical examinations. Since this will be effective in January, 1973, this program will be developed in December of this year. Further, the National Institute of Occupational Safety & Health (NIOSH) will be continually formulating new standards. One of these looming significantly on the horizon is the heat exposure

standards. This could have a significant effect on our operations and is being studied by us.

Preliminary plans have been made for a supervisors meeting for the Thorpe Insulation Company personnel in Corpus Christi. This upcoming supervisors meeting, which we anticipate holding in the early part of the first quarter of 1973, will follow a similar format to that held in Houston in June of this year.

Attached as Exhibit IX is a copy of a recent publication of the Research Institute Service to which we subscribe. It outlines the 25 most common violations of the OSHA Act drawing citations. Almost without exception, these have been covered in our program of memorandums and was part of the aim of that program. 1973 will be see a significant effort on our part to review and keep uppermost in our superintendent's mind the need to comply with the law and avoid violating these portions of the Act.

As always, we will necessarily keep a close eye on the cost of complying with the new law, and may find it necessary in the future to charge a fee such as a percent of labor or some other charge to account for increasing costs on work performed for customers, particularly on cost plus work.

Since it has always been Thorpe's policy to work safely, many of the features of the new law merely constitutes "fine tuning" of our safety program. Other facets of the law signify a significant change in past practices. To this end, we plan to re-write our standard company safety rules and distribute them to our field forces. We also anticipate the need to develop some sort of continuing education program for our field personnel to enable them to work not only safely but in compliance with the law.