A GUIDEBOOK

for

Local Union

HEALTH AND SAFETY COMMITTEES

By

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(Please note that this is a working draft of this Guidebook. We welcome comments or suggestions, especially concerning additional materials which readers would find helpful to have included.)

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PREFACE

Occupational Health and Safety is currently a top priority issue at all levels of organized labor. Stories of on-the-job death and disease are emerging rapidly. Books by Stellman-Daum, Wallick, Scott, Brodeur and Kinnersly have clearly aroused the interest of the American workers.

In the State of California alone, 620,000 workers suffered reportable occupational injuries or illnesses during 1972. This figure did not include workers in the agriculture, mining or railroad industries. The nationwide statistics are equally staggering. Some 16,000 workers are killed annually (on the job); leading authorities estimate an additional 100,000 workers die annually from exposure to toxic substances in the workplace. Organized labor is attacking this problem on all fronts. Through collective bargaining agreements focused on health and safety issues, a potential course of action is being developed which will deal, in part, with this national crisis. One specific approach is the formation of union Health and Safety Committees. Although these Committees have existed in the past, they are now being reborn as a result of either a 'contractual provision' or a 'letter of agreement'. The union Health and Safety Committee concept appears to be a good one. An immediate problem local unions are faced with is guidance in the formation, structure and function of their Health and Safety Committee.

This 'Guidebook' is prepared with the intent of simplifying the organizational problems many local unions face in establishing an Occupational Health and Safety Committee. A special effort is made to include very basic information in addition to specific data the Committee will need as it progresses.

The material as presented is up-to-date. With the tremendous amount of activity in Occupational Health and Safety at all levels of government, organized labor, medical and scientific research and public interest groups, this 'Guidebook' could become obsolete rapidly. The staff of the Labor Occupational Health Project is committed to periodically publishing updates of the 'Guidebook' materials as they become obsolete plus providing additional new materials as they are developed.

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LOCAL UNION HEALTH AND SAFETY COMMITTEE

I. INTRODUCTION.

Organized Labor - Hope for Health

On November 8, 1973, a Conference on Occupational Health and Safety was held in San Francisco, California. This conference was co-sponsored by the California Labor Federation, AFL-CIO, and the Center for Labor Research and Education, Institute of Industrial Relations, University of California, Berkeley.

An audience of approximately 400, mostly delegates from local unions throughout the state, listened attentively as the many guest speakers expounded on health and safety issues in the workplace. The audience was presented with such information as a historical background of unresolved health and safety problems; staggering statistics of work related injuries, illnesses, deaths, diseases and disabilities; and alternative approaches which should be considered in attempting to correct this situation.

Throughout the conference, the speakers were consistent in stressing the importance of continued union involvement in health and safety matters. Dr. Irving Selikoff, a noted authority in occupational medicine, stated: "...the group which is the most concerned and which at the same time can do the most to change things, is now involved. That group is organized labor - the trade unions. The recent contract experiments by UAW, Rubber Workers, OCAW and UFW show clearly that occupational safety and health provisions can be won through collective bargaining." This opinion was expanded on when labor economist Harry Polland emphasized "the collective bargaining contract provides the best instrument for the surveillance and enforcement of legislated health and safety standards... In order to do so, it becomes essential for unions to incorporate comprehensive health and safety provisions into their contracts." Finally, labor attorney Victor Van Bourg challenged the labor representatives to "adopt a system of health and safety rules and regulations of their own, and do so by bringing in medical consultants and other professionals who understand workplace problems. In the process they (labor unions) must begin to deal with such common hazards as the speed-up of production, piece rate systems which break workers down, and the continuous addition of new machinery, equipment, processes and materials which no one knows anything about."

Therefore, it can truly be said that the formation, maintenance and functioning of a Safety and Health Committee is a vital activity and membership service of a local union. Recognition of this by local union leadership is critical since the Committee's primary concern is centered around the physical well-being and the very lives of its members. No employer, government agency, or other organization can assume the same kind of responsibility for safeguarding the lives and health of its members as the union itself.

An active safety program offers a union a good opportunity to demonstrate to its members the value of union membership. It can be used as an important vehicle for winning and increasing membership loyalty, if the union actually delivers on safety-health matters, and if it gives adequate information to its members about what it has achieved.

One of the primary objectives of the Labor Occupational Health Project is to encourage the formation of union Safety and Health Committees. Further, it will provide guidance to those Committees in the form of printed educational materials, specialty schools, seminars, conferences, workshops and consultant services. It is of the utmost importance that organized labor be well versed in all phases of health and safety, from the early idenification of safety and health problems or violations in the workplace, to the application of procedures available to rectify the problems, i.e. offering input on proposed government standards; negotiating proper contractual provisions; and having representation on standards, appeals, and workers' compensation boards.

The Laws Can Help

The climate has never been better for the formation of union Health and Safety Committees now that there is a legal obligation on the part of the employer through the OSHA Act of 1970 and the Cal/OSHA Act of 1973 to provide a place of employment free from recognizable hazards. Even though many may assert that the laws are presently somewhat ineffective, employers are still faced with the possibility of an inspection and are becoming more aware of the positive input labor offers in the identification of violations in the workplace.

The laws were passed as an effort "to assure so far as possible every working man and woman in the nation safe and healthful working conditions and to preserve our human resources." In addition to physical safety in the workplace, the law provides for standards relating to the use of toxic substances which could cause occupational disease or have harmful effects on workers. However, these new laws have not been given adequate funds or personnel to enforce them. Therefore, they will fulfill their purpose only if unions throughout the country learn how to use the laws and are vigilant in getting them enforced.

The Union Must Act

A practical means of dealing with any specific responsibility is for the union to establish a committee for that purpose. Unions have always needed Health and Safety Committees. However, for many reasons, those that have existed often were not active or effective. Prior to establishing a union health and safety committee, the local union president could assign a task force to investigate and report on the following:

a) The accident/illness/injury frequency rate experience of the local union membership.

b) The annual total cost to the employer: actual cost and hidden cost.

c) The existing contractual language. (A good number of collective bargaining contracts have 'clauses' discussing health and safety committees or joint committees. The union should closely examine these clauses and their history. It is of particular importance to determine if the existing clause has ever been interpreted by the union.)

d) Local union by-laws. Do the by-laws call for a safety committee? Should they be updated?

e) Is there an existing 'joint' labor/management health and safety committee? If so, is it effective?

In evaluating a 'joint committee', the task force should ask:

(1) Do the union and the employer have an equal number of members?
(2) Does the union have the sole right to appoint its representatives?
(3) Do the chairmanship and secretaryship rotate between the parties?
(4) Do the committee's functions include joint activity, as follows:

- frequent unannounced health and safety inspections?
- review of employer policies on toxic materials?
- investigations of injuries, accidents and diseases, reports to regulatory agencies, employee education and training?
- other items of mutual interest?

(5) Who makes up the agenda and approves the minutes?
(6) Do the union members of the committee have the freedom to meet independently at company expense?
(7) Can the union members of the committee investigate and act independently between joint meetings?
(8) Does operating management pay attention to committee recommendations and decisions?
(9) Is there a neutral procedure for breaking tie votes?
(10) Do the union members of the joint committee have the right to inspect the plant at reasonable times with health instruments?
(11) Do the union members of the joint committee have access to all company data on monitoring, toxic materials, relative costs of safety and health materials, relative costs of safety and health improvements, workers' compensation records?

f) Recommendations to the local union based on their findings. Many local unions have Health and Safety Committees administered and controlled solely by the union. They operate completely independent of any co-existing joint labor/management committees. This does not mean that a local union committee should not have a close working relationship with a joint labor/management committee. Many or all members of the local union Health and Safety Committee might also be the union representatives on a joint labor/management committee.

II. HOW TO FORM A COMMITTEE.

A Health and Safety Committee is frequently provided for in the local union by-laws. Following is an example of a typical local union by-law:

> 'There shall be a standing Health and Safety committee composed of a chairman, vice-chairman and secretary. The chairman will be appointed by the President and all committee members shall be approved by the President. It shall be the duty of the committee to monitor all Health and Safety contractual provisions. The committee shall meet no less than once a month at a time and place selected by the committee and approved by the membership. The committee shall respond to the occupational health and safety requests from the membership and report to the membership monthly on their activities.'

If a local union has contractual relations with only a single-plant employer, the local Health and Safety Committee will be concerned only with conditions in that plant, shop or worksite. However, if local union members are employed in two or more workplaces, then it might be expected that there would be a separate committee, sub-committee or committee person assigned to each shop, plant or worksite. This might also be the case under multi-employer bargaining relationships. An alternative arrangement is needed where you have multiple shops with few employees.
Here it is feasible to assign all responsibility for health and safety matters in each shop or worksite to union stewards who would then report to a central Health and Safety Committee

In either situation, the central local union Committee would be primarily concerned with coordinating all the health and safety programs, obtaining needed technical information, and assisting in processing health and safety complaints and requests for investigations with the proper authorities.

III. RECOGNITION IN THE CONTRACT.

Since it is a union committee, the Health and Safety Committee is not created by the contract. However, Committee members must have the right during working time to survey the workplace periodically and to investigate accidents, unsafe and unhealthy conditions and practices. Therefore, these rights of Committee members and the Committee as a whole may need to be negotiated into the contract if they are not given recognition by the employer either voluntarily or after informal discussion. For some examples of existing contractual language providing for union Health and Safety representatives, please refer to the 'Collective Bargaining' section of this Guidebook.

IV. JURISDICTION AND AUTHORITY.

A Health and Safety Committee usually has general responsibility over health and safety matters in a specified work place, plant or a group of workplaces or plants. This means that it should become the coordination center for all information and action relating to the maintenance of safe and healthful working conditions. The Committee works with management to assure the carrying-out of all contract provisions, laws, regulations and recommended practices relating to occupational health and safety. It is also in a position to assist workers in the development of safety consciousness, in learning safe work habits and procedures, and acquiring the habit of safe thinking both on and off the job.

V. COMMITTEE MEETINGS.

A local union Committee should plan to have at least one formal meeting per month while leaving open the opportunity for other special informal or emergency meetings. Under certain conditions, a large Committee may break up into several small sub-committees which might meet more frequently. The agenda of Committee meetings should be worked out beforehand by the Committee chairman in consultation with other responsible officers and staff. In addition, at each meeting, the Committee members would be expected to help set the agenda for a subsequent meeting. A suggested order of business for the regular meeting of the Health and Safety Committee follows:

Order of Business

(Safety and Health Committee)

1. Minutes of previous meeting
2. Secretary's report
   - Correspondence
   - New materials and publications received
3. Chairman's report
   - Status of action taken at previous meetings
   - New safety and health developments affecting local members (accident and injury statistics, new toxic materials, results of investigations, etc.)

4. Reports from sub-committees, individual shops or departments

5. Old Business
   Items not completed at previous meetings

6. New Business
   Action on recommendations raised by reports
   Action on complaints of violations of OSHA or Cal/ OSHA

7. Education Section
   Discussion or talk on some safety or health topics.

'The above Order of Business is for the purpose of indicating where various matters might be brought up in the course of a meeting. Some of the items, of course, might not be on an actual agenda of any particular meeting.'

-- IAM Guidebook

VI. SELECTING THE COMMITTEE MEMBERS.

How Large a Committee?

The appropriate size of a Health and Safety Committee depends on the particular local union situation. Consideration should be given to the seriousness and variety of potential health and safety problems which would be under the jurisdiction of the Committee. Further consideration should be given to the Committee activity on or input to state and federal standards setting boards; hearings; local, state or federal investigations; and possible coalition with other union health and safety committees. Additionally, some local unions may not have adequate finances to properly fund a large enough Committee to service the needs of their membership. This problem could be solved by either imposing an additional per-capita tax on the membership or by negotiating the funds with the employer in a cents-per-hour allocation per union employee.

A Committee should consist of at least three members; with the maximum determined by the size of the plant or plants, or the number of worksites. Consideration must also be given to the complexity of the health and safety problems. Effort should be made to have representation from the principal different types of departments or operations, and from all shifts.

If the complexity of the situation justifies a large Committee (over 10, for example), it might be best to divide the responsibilities among several small sub-committees (by buildings, worksites, plants or specialized operations) and then have representatives from each sub-committee constitute the official local union Health and Safety Committee.

What To Look For

Committee members should be chosen on the basis of sincerity and interest, ability to work cooperatively with others and willingness to become actively involved in the mission of maintaining safe and healthful working conditions for all. Although experience with safety and health problems as such may be hard to come by, it would be important to choose members who have had a wide range of occupational experience. They should also be willing to learn enough about occupational health and safety problems and solutions to serve the entire local union.

In some situations, it would also be important to select members with appropriate security clearances if the local union has members working in security areas.

How To Pick Committee Members

Some local unions may choose to elect the members of their Health and Safety Committee by popular vote of the membership. However, the most common method of selection is appointment by the local union President, after a search has been made for interested and competent persons. Of course, the appointment could be confirmed by a vote of the membership, or of the delegates in the case of a district council. As for the term of office, it is desirable to have it long enough for a member to gain some expertise in the subject of safety and health. At the same time, these duties should also be learned by other members, thus encourafing a greater dispersion of knowledge about safety and health. Therefore, a good practice might be to provide for staggered terms of office, so that at no time would a Committee be composed completely of inexperienced members. This decision would obviously be influenced by whether or not the positions were full-time paid positions or voluntary positions.

VII. PREPARING THE COMMITTEE FOR ITS JOB.

Before the Safety and Health Committee can get started, it needs certain basic information and equipment. The International Union staff could assist the newly appointed Committee Chairman in such preparation as the following:

1. Past Workers' Compensation claims, accident reports from previous years, hazards of the industry, history of employee grievances.
2. All the basic information available in the form of pamphlets, copies of laws, standards, etc., should be collected for the immediate use of the Committee. This would include, of course, the texts of the OSHA Act of 1970, and the Cal/OSHA Act of 1973. Additionally, the State Workers' Compensation Laws and Procedures pamphlet would be useful.
3. Prior to the first meeting of the Committee, it would be desirable to request all members to become generally informed about these laws by reading through the texts or some prepared summaries.

4. Provision should be made for allocating files and shelves to collect health and safety materials and records in an orderly way for ready reference. Particular emphasis should be placed on obtaining copies of Cal/ OSHA health and safety standards relevant to the particular industry.

5. A list should be compiled of addresses and phone numbers of the Cal/ OSHA and Federal OSHA agencies in the area. As the Committee learns of other valuable resource groups or personnel, such as doctors, lawyers, hygienists, educators and health and safety specialists, they should record their names, addresses and phone numbers for reference.

6. A check should be made of available training opportunities for learning about the Cal/ OSHA and Federal OSHA laws and related legislation in order to make it possible for Committee members to obtain the training when it becomes available. Information on the availability of this training can usually be obtained through the International Union. A weekly publication entitled 'Cal-OSHA Reporter' lists training courses as they are announced in addition to the latest Health and Safety developments in government.

Refer to the appendices at the end of this guidebook for resource information. Also, attempt to identify concerned medical and legal consultants willing to furnish expert guidance and assistance to your local union Committee.

VIII. COMMITTEE RESPONSIBILITIES.

In a broad sense, a union Health and Safety Committee has certain functions it must and can perform regardless of the health and safety laws which may be in existence at any particular moment. However, Federal laws set limits to the support, assistance, and resources which the Committee can count on from outside the union as well as from the employer with whom it has a contract.

The passage of the OSHA and Cal/ OSHA laws has strengthened the potential of the union Health and Safety Committee for effectively reducing occupational injuries and illnesses and improving the work environment. The new laws establish the rights of workers and of union representatives over and beyond the terms of existing contractual agreements. They provide the investiagting and enforcement machinery for handling the safety and health problems which are not routinely settled with management.

The following descriptions of Committee duties cover both the routine functions of a union Committee in its day-to-day operations and the new special procedures which are provided by the State and Federal OSHA Acts. However, the provisions of the Acts are so important and far reaching that the Committee should supplement this basic outline by reference to the Acts as well as to available publications from their respective International Unions, the AFL-CIO and government agencies.

1. Liason With the International Headquarters.

Since the OSHA bill became law, all 116 International Unions affiliated with the AFL-CIO have designated official Health and Safety Representatives.

Approximately one-half of the International Unions have full-time Health and Safety officials. It is important to maintain a free and rapid flow of information between local committees and the International representatives. In many cases, there will be a territorial or district representative responsible for servicing local unions in a defined area and eliminating the need for local committees to communicate directly with the International Headquarters. In any case, local Health and Safety Committees should maintain good vertical communications within their International structure during the Committee planning stage and throughout the life of the Committee.

2. Registration With the International Headquarters.

One responsibility of an Interantional Union Health and Safety representative is the channeling of information from government agencies to local union Health and Safety Committees. He may also assist in the handling of complaints, problems and requests from local Committees which need to be worked out with government agencies, courts and Congress. Each local union Health and Safety Committee should register with the International Headquarters and provide the name and address of the Committee Chairman.

3. Relations With the Employer.

Despite its independence, the union Committee should maintain close contact with any existing union-management Joint Health and Safety Committee. Where no Joint Committee exists, the Union Committee can recommend to the local union President some appropriate procedures for bringing immediately to management's attention any unsafe or unhealthy conditions and for receiving information from management on action taken or contemplated on these matters. Arrangements need to be made with management either directly by the Committee or through the appropriate union official to set up routine procedures on all of the following operations which are relevant to a particular plant, shop or worksite:

a) For obtaining and maintaining a file of reports on work accidents and illnesses and for reviewing them periodically.
b) For periodic inspection of the plant, shop or worksite.
c) For periodic discussion of such matters as:
    1. Information on existing and newly introduced toxic substances (such as: name, chemical composition, nature of hazard, precautionary procedures, etc.);
    2. Survey of potential hazards (including records of monitoring, medical tests, examinations, comparison with established standard, etc.);
    3. Control measures (such as substitution of less hazardous materials, enclosure of harmful processes, ventilation, wet processing, decreased work exposure, use of personal protective devices, etc.).

IX. COMMITTEE FUNCTIONS.

1. Initial and Periodic Surveys of Safety and Health Conditions.

The Committee needs to be well acquainted with the conditions and potential hazards in the entire workplace. To be effective, they must be able to recognize and evaluate unsafe and unhealthy conditions. A systematic survey is the most effective way of doing this. The survey should include an initial department-by-department, work area- by- work area comprehensive inventory of conditions and interviews with the workers in the areas. A health and safety 'checklist' and 'survey form' will aid in this process. (See 'Forms & Checklists' section of this Guidebook for samples). Thereafter, the Committee should make periodic follow-up surveys of the areas to monitor conditicns. These surveys would cover such items as the following:

Safety

a. Buildings - floors, stairs, exits, fire protection;
b. Layout - space for working, moving about;
c. Access to workplace - aisles;
d. Illumination - adequacy;
e. Machinery, equipment - guards, maintenance, safety devices;

Health

a. Ventilation - general and specific;
b. Materials - toxicity, handling methods, adherence to precautionary methods, generic names, protective devices;
c. Process - extremes of temperature, humidity, shock, vibration, noise, radiation, fumes, dust, speed-up.

In most circumstances, the Committee would not be capable by itself of collecting routine information on monitoring hazards, "near accidents" and other important data. Therefore, alternative methods for channeling this information from individual workers to the Committee should be considered. An individual in each department could be designated as shop safety patrolman or in cases where a shop steward exists, the steward could be assigned these duties. The Committee should adopt a 'Health and Safety Survey Form' and obtain a hazard checklist (see 'Forms and Checklists' section).

How to Use the Survey Form

a. The workplace should be divided into logical areas where similar types of processes occur. If an area has more than one process, then several forms should be filled out for each individual process.

b. Processes should be identified by their commonly used names. It is important to know where the worker is during the process, i.e. is he in a confined space, on a platform, underground, etc.

c. To properly assess the chemical hazards, all chemicals used or produced must be identified. If you are only able to identify the chemical by trade

name, indicate that name on the form. After completion of the survey it will be possible to utilize outside resources to identify the substance(s).

d. In open or closed processes, fumes, dusts, mists or gases could be present. Attempt to identify which of these forms of pollutants is present and what they are.

e. Ventilation can be natural (open windows or doors), fans, ducts, or blowers. There may be no ventilation at all. A reasonable test would be to ask the workers in the area if they feel the ventilation is adequate. Note their remarks.

f. The items listed in the sample 'HAZARD CHECK LIST' (See 'Forms and Checklists' section) represent various physical hazards that may be present in the workplace. Though all the items have serious consequences, be particularly careful to know all radiation sources. They should be marked with the 'Atomic Energy' seal.

g. In assessing the hazardous potential of the work environment, air samples must be taken to determine the concentration of the various solids. (See 'Hygiene and Health' section for test equipment.) By law, all areas with asbestos exposure require that at least one such measurement shall have been taken. If no air samples were taken in the past, write this down. Make a formal request, in writing, for results of tests that have been conducted.

h. To properly establish a statistical base on the effects to workers from long term exposure to various industrial hazards, it is vital to survey the workers and document all health problems. For instance, if any worker complains of rashes, nose bleeds, headaches, nausea, allergies, or frequent kidney infections, this can mean there is some substance or condition in the workplace causing the problem. The Committee should obtain copies of all periodic medical examinations given the workers. By compiling these statistics, establishing an on-going record-keeping system, the Committee will eventually be able to pin point the real problem areas and make recommendations for corrections. (See 'Forms and Checklists' for sample Health Questionnaire.)

i. Have any accidents occurred in the area? What type, and what action was taken to prevent recurrence? Establish an accident file in addition to the illness file. Documentation is very important. Especially when an accident occurs after the union Health and Safety Committee has suggested a correction for a condition and the correction was ignored by management and later an employee was injured as a result of the condition.

j. If there was a noise survey of the plant, indicate the level found and the day the test was taken. Many substances can be monitored by permanently installed devices. Are there any such devices in the area? If so, when was the monitoring equipment last calibrated and at what level is the alarm set?

As the survey reports are completed, the Committee should be able to pinpoint many of the problem areas. For instance, if it appears that workers are using chemicals known only to them by trade names and are not informed of the hazards of the chemicals, this should be an immediate topic of discussion with management; either at the Joint Union-Management Health and Safety Committee meeting or through the pre-established protocol.

If the survey reveals inadequate ventilation, lack of proper monitoring, exposure to physical hazards and a neglect to administer the appropriate medical examinations, then this too should be discussed at the meeting. To systematically survey the workplace, the Committee should develop an agenda for fruitful and meaningful health and safety needs. This survey should be repeated monthly. All survey records should be kept in the local union office.

2. Obtaining Management Action.

While OSHA and Cal/OSHA provide for the immediate filing of an official complaint on occupational health and safety problems by an individual worker or his authorized union representative, the union Health and Safety Committee should offer the employer an opportunity to resolve the issue internally before resorting to outside agencies. The union Committee would normally inform the Company of the problem along with all available facts; include any illnesses or injuries attributed to the condition and any violation of Cal/OSHA or OSHA standards. Suggest an acceptable correction along with an estimate of the costs of correction. Additionally, set a time limit for completion, such as 24 hours, 5 days, or 30 days. In some cases it may be necessary to allow a longer period of time for correction (such as two years) based on the proportion of the problem. If so, request a percentage of completion at various time intervals. This procedure may be either informal or formally established in the contract. The Committee has the responsibility to make sure the hazard is satisfactorily corrected by the company in a reasonable period of time. After having followed the above procedure, they now have a well documented complaint. If they are not satisfied with the action taken by management, they may choose to file a formal complaint with Cal/OSHA. A complaint that has been taken first to the employer in good faith by an authorized union representative should receive far more attention from Cal/OSHA and OSHA compliance officers than will a complaint without a history.

3. Cal/OSHA and OSHA Components.

Cal/ OSHA provides definite procedures for dealing with:

a. A complaint about 'imminent danger' threatening serious injury or physical harm to employees;

b. A complaint about any 'violation of a standard' from among the many standards adopted by the California Division of Industrial Safety;

c. A complaint about the failure of an employer to perform his 'general Duty' of maintaining a workplace free from recognized hazards;

d. A request for an inspection of the premises in connection with any of the above violations.

The Acts expressly recognize the rights of individual workers and their union representatives to initiate and carry through on these complaints and requests. A union Health and Safety Committee would normally take the lead in

initiating these complaints and requests. However, it should always be understood that the law permits the individual worker to take action himself if he so desires. The Committee could assist the individual to the extent possible and also would follow the particular case through all steps in the procedure in order to protect the welfare of all employees.

Detailed explanations of the procedures provided by the law are available in other documents and should be in the hands of every Committee. The principal duties of the union Health and Safety Committee with respect to the enforcement of the Acts can be summarized as follows:

a. Checking Hazards in the Workplace.
The Committee should request copies of all Cal/OSHA and OSHA standards from the appropriate government regional offices. (See sections on 'Cal/OSHA' and 'OSHA'). Then check conditions in the workplace to make sure they meet the minimum standards.

b. Requesting an Inspection.
As stated above, OSHA and Cal/OSHA provide procedures for requesting an inspection by a Compliance Officer whenever:

1. a standard has been violated;
2. there is imminent danger;
3. a recognized hazard exists.

If a health or safety problem has not been taken care of satisfactorily by management through the procedure established by the Committee, the Committee should request an inspection by filling out an official Cal/OSHA complaint form (see section on 'Cal/OSHA') and mailing it to the regional office of the California Division of Industrial Safety.

The Committee needs to be well informed as to the information required on this form for each of the three types of violations. Also, it should be aware of its rights:

1. to phone in a request for inspection, especially in the case of imminent danger;
2. to write a letter in place of using the 'official complaint form' (as long as all the required information is included). See sample letter in the 'Cal/OSHA' section.

c. Assisting in Workplace Inspection and Walkaround.
It is particularly important for the Committee to establish a well defined procedure for the selection of the union representative(s) who would be authorized to accompany the Compliance Officer during the inspection. Since Compliance Officers must arrive without advance notice, there must be a prior decision on the authorized union representative that will accompany the inspector. By official letter, the union should immediately inform the company of the representative it has designated (see section on 'Forms and Checklists' for sample letter) and include a list of authorized alternates in the event the principal representative is not available at the time the inspection takes place. This procedure should also be made known to the governmnet agency at the time of the request for inspection. This should eliminate any chance of misunderstanding when the inspection occurs.

The Committee must make sure to brief the union 'walkaround' representative about the violations which have been charged and about any related problems. In addition, it should take advantage of the inspector's presence to raise any other current violations or hazardous conditions.

d. Following Up On the Closing Conference.

After the inspection, Cal/OSHA requires the Compliance Safety Engineer to conduct a closing conference with the highest level of management available at the plant or worksite. At this conference, the CSE must review his inspection findings and inform management representatives of all follow-up citation and penalty procedures and all appeal rights. The union representative is excluded from the closing conference unless the employer agrees to invite him. However, the CSE will arrange a separate review of his inspection findings with the authorized union representative if he is requested to do so.

e. Following Up On Inspections.

An important phase of the Committee's work after an inspector leaves is to keep itself informed on his decisions. This enables the Committee to take any other necessary actions permitted under the law. If an inspector finds a violation which cannot be corrected immediately, he is expected to issue a citation. Since a union representative would normally have signed the original complaint, the union will receive a copy of the citation. The employer will also receive a copy of the citation which he is required to post in the area where the hazard exists. The employer is further required to leave the citation posted until the hazard is removed or corrected. The Committee should monitor this procedure to assure the laws are being adhered to. (See sample citation in 'Cal/OSHA'section)

f. Filing Appeals.

Cal/OSHA is required to notify the complaintant of what actions, if any, the Division is taking as a result of an inspection caused by an 'Official Complaint'. A citation can be issued any time within six months. The size of the fine in dollars and the length of the abatement period will vary according to the seriousness of the violations found and the ease or difficulty of correction. The important point for the union Health and Safety Committee to remember is that the Division must issue a citation whenever a violation of a safety or health standard is discovered. The Division must conduct an informal review of any refusal by a Cal/OSHA inspector to issue a citation for an alleged violation and must furnish a written statement of the findings of this review upon the request of the complaintant or his authorized union representative.

Employees or their authorized union representatives can appeal to the Cal/OSHA Appeals Board within fifteen days of the citation if they feel that the abatement period is wrong or that the citation failed to deal properly with health and safety problems. The affected employee or employee representative has a right to participate as parties in an appeal hearing, regardless of which party filed the appeal.

After the Appeals Board gives its decision on the appeal, any affected person may petition for reconsideration of that decision if the petition is within thirty days of the Appeals Board decision.

g. Complaints Against State Program Administration.

The Federal OSHA Act placed all authority for enforcement of safety and health standards in places of employmnet on the Federal government. Provisions of OSHA allowed for states to assume the authority over workplaces within their respective states providing the states agree to carry out an occupational health and safety program equal to or better than the Federal program.

A vital responsibility of the union Health and Safety Committee is to report any unhapiness the Committee may have with the manner in which the State handled the Committee's complaints. Federal OSHA has prepared special forms for this purpose (see 'Cal/OSHA' section for sample CASPA form) and asks that all employees or authorized employee representatives assist them in supervising the state program by sending in completed complaint forms or letters of complaint whenever a deficiency in the state program is noted. These forms (termed 'CASPA' forms) may be obtained from the U.S. Department of Labor, OSHA Administration, 450 Golden Gate Ave. Box 36017, San Francisco, CA 94102.

The right to make a CASPA complaint appears in both Spanish and English on all Cal/OSHA information posters along with other important employee rights.

(A sample 'Letter of Complaint' is in the 'Cal/OSHA' section)

4. Requesting a Health Hazard Evaluation.

The OSHA Act established within the U.S. Department of Health, Education and Welfare (HEW), a new National Institute for Occupational Safety and Health (NIOSH) primarily for the purpose of carrying out the research and educational functions assigned to the HEW Secretary under the Act. (See 'OSHA' section for NIOSH information.)

NIOSH has proven to be an important resource for union Health and Safety Committees as one of their functions is to conduct Health Hazard Evaluations in the workplace at the request of an employee, an authorized employee representative or the employer. The union Committee could request a NIOSH health hazard evaluation by completing the request form (see 'OSHA' section) and mailing it to: NIOSH, Hazard Evaluation Services Branch, U.S. Dept. of Health, Education and Welfare, Cincinnati, Ohio 45202.

Under section 20(a)(6) of the OSHA Act, (29 U.S.C.669(a)(6)), NIOSH will determine following a written request by an employer or authorized representative of employees, specifying with reasonable particularity the grounds on which the request is made, whether any substance normally found in the place of employment has potentially toxic effects in such concentrations as used or found; and shall submit such determination both to employers and affected employees as soon as possible.

5. Committee Input to Cal/OSHA and OSHA.

In addition to the previously outlined union Health and Safety Committee duties as they relate to the legal provisions of the Acts, there are many other valuable contributions the Committee can make by offering their input to the following:

a. National Advisory Committee on Occupational Safety and Health. NACOSH (see 'OSHA' section) was established under section 7.(a)(1) of the OSHA Act to advise, consult with, and to make recommendations to the Secretaries of DOL and HEW on matters relating to the administration of the Act. NACOSH meets at least twice a year and the meetings are open to the public.

b. Standards Advisory Committees: Federal (see 'OSHA' section) Time permitting, the union Health and Safety Committee should pass

on their experience with OSHA Standards to the appropriate Standards Advisory Committee in the form of constructive suggestions for improving the standards. Advisory committees are sometimes used in the formulation of needed occupational health and safety standards. There are two types of committees -- standing and ad hoc.

Standing committees, such as the Construction Standards Committee, remain in existence for years because of the many standards which can be expected to be needed for this industry.

Ad Hoc committees, such as the Asbestos Study Committee, are created to tackle a single problem and are dissolved when the problem is solved.

The advisory committees are charged to study all relevant material, consider possible alternative solutions and take into account the feasibility of the proposed standard.

The Federal Advisory Committee Act of 1973 enables the general public to actively participate in advisory committee deliberations by providing means for the public to submit relevant material for committee consideration.

The local union Health and Safety Committee can actively participate in providing material to the Advisory Committees or they may choose to forward their input to their respective International Health and Safety Representatives for presentation at the International Union level.

c. Cal/OSHA Standards Board.
The Cal/OSHA Standards Board (see 'Cal/OSHA' section) is charged with adopting, appealing or amending occupational safety and health standards and orders. The Board meets monthly, rotating between Sacramento, Los Angeles and San Francisco. Notice of the meeting place and time must be published in Sacramento, San Francisco, Fresno, Los Angeles, and San Diego in newspapers of general circulation at least 30 calendar days prior to each such meeting. Written notice of all such meetings and an agenda shall be given to all persons who make a request for such notice in writing to the Board.

Local union Health and Safety Committee members may choose to appear before this Board and offer testimony on the agenda items. They would also have the opportunity to suggest agenda items for future meetings and propose standards for consideration by the Board.

d. Cal/OSHA Standards Advisory Committees (see 'Cal/OSHA' section)
These committees will function very similarly to the Federal OSHA Advisory Committees. All Advisory Committees will have members from organized labor on the committee. The union Health and Safety Committee should maintain a list of names of the Advisory Committee members and pass on pertinent data to them.

6. Maintenance of Safety and Health Records.

The local union Health and Safety Committee has responsibility for keeping its own files on all safety and health matters. It is important for the Committee to give careful thought to these files in order to keep the inflow of information manageable. In addition to information on standards and materials provided by government, unions, institutes and a variety of other sources the Committee will develop, there will be the records of investigations, reports on occupational accidents and illnesses, complaints of violations, requests for inspections, and assorted communications to all the necessary contacts. (See 'Forms and Checklists' section).

Documentation is the most vital component of a successful union Committee. All the procedures, functions and suggested structure of a local union Health and Safety Committee as outlined in this pamphlet can be successful if the local union membership and leadership support the Committee as follows:

a. Provide the Committee with documented facts when called on.

b. Provide the Committee with a desk, typewriter, bookcase, and file cabinet in the union office.

c. Make certain the Committee has access to a telephone.

d. Send Committee members to health and safety educational courses.

e. Help the Committee develop a library of reference books (see 'Materials - Sources and Resources' section)

f. Provide access to a typist and a copying machine.

The value of documentation and maintenance of records will prove its worth time and time again as the union Health and Safety Committee progresses. The records will enable the Committee to develop trends in accidents and illnesses, patterns in management and government decisions, and histories of the members' occupational exposure to toxic substances in the workplace. There are many more uses for the records and many more reasons to stress documentation. The Committee will learn from its own experience the total value of good records. An experienced local union Health and Safety Committee will usually adopt as a Committee policy, "Write it, don't say it".

7. Workers' Compensation.

The work of a union Health and Safety Committee by necessity comes into close contact with the handling of Workmen's Compensation cases resulting from occupational injuries, illnesses or deaths. When the local union has a well established procedure for handling such cases on behalf of union members, the Committee may be in a position to provide information from its records which will assist in the processing of these cases. The Committee would also be in a position to assist in the more effective spotting of potential compensation cases and in recommending improved union procedures in this field.

The Committee should also seek out 'reputable' legal assistance in their communities, particularly attorneys with proven abilities to handle occupational health and safety related Workers' Compensation cases.

8. Reports to the Membership.

Local union Health and Safety Committees should make a concerted, continuous effort to make activity and progress reports to the membership. This can be accomplished in several ways. One method is to assign a Committee member to make a Committee report at the regular membership meeting. This assures the activities of the Committee will be recorded in the minutes of the membership meeting. Other alternative methods include special bulletins distributed, if possible, at the worksite or at the union hall; posting reports on the union bulletin boards; publishing reports in the local union newsletter; mailing reports to all members in the local or publishing a periodical Health and Safety newsletter. (See 'Forms and Checklists' section for examples) The reports to the membership should stimulate rank and file interest in occupational health and safety. Such interest could result in more input from the members in the form of hazard recognition. Normally, copies of all reports would be sent to the health and safety official at the International Headquarters thereby completing the communication cycle.

9. Membership Education.

An effective health and safety program in industry depends to a large extent on the degree the workers and union leaders are informed about health and safety in the workplace and knowledgeable of the laws designed to protect them. The local union Health and Safety Committee is in the position to understand the various types of education required. In most cases, the Committee would call upon the International Union for support of any proposed education program and for assistance in carrying it out. A total Health and Safety Education Program would probably include the following objectives which would call for several differing types of education projects:

a. Broad dissemination of information and understanding of AB150 (Cal/OSHA) and Public Law 91-596 (OSHA).

   (1) to safety stewards, shop stewards, safety patrolmen at the regular steward meetings or at special meetings.
   (2) directly to all employees through shop meetings and distribution of materials.

b. Promotion of general education on good health and safety practices. Although health and safety education among employees is a responsibility of management, the Union Committee should encourage management to establish this type of education and can cooperate in helping union members understand its importance. Such union cooperation in health and safety education for workers, of course, must not be construed as a substitute for management's primary responsibility for completely eliminating unsafe and unhealthful conditions in the workplace.

c. Specialized training opportunities.
   The Committee should encourage the union to participate in local, regional and national seminars and informational conferences on safety and health matters where such participation would contribute to the improvement of the local union's health and safety program.

COMMITTEE FORMS AND CHECKLISTS

'NOTIFICATION OF AUTHORITY' LETTER

September 11, 1973

Mr. John Doe - President
Acme Company, Inc.
San Francisco, CA

Dear Sir:

This is to notify you that until further notice the following employees are designated as the authorized Union Health and Safety Committeemen:

Robert A. Fowler, Chairman

Art W. "Fritz" von Bradford, Vice-Chairman

Richard J. Jackson, Secretary

Thank you for your consideration in this matter.

Very truly yours,

J E Stilwell

John E. Stilwell
President and Chairman
Local Lodge 1781, IAMAW

OPE-3 AFL-CIO(89)

HRH:em
cc: V. Edman
LL 1781

CAL/OSHA RECORDKEEPING GUIDELINES--MEDICAL TREATMENT AND FIRST AID

Nature of injury	Medical treatment	First aid
Cuts, lacerations, punctures, abrasions, splinters	Sutures (stitches)	Bandaging on any visit to doctor or nurse.
	Treatment of infection	Application of antiseptic on first visit or on subsequent visits if needed to prevent infection.
		Application of ointments on first or subsequent visits to prevent drying or cracking of skin.
	Removal of foreign bodies requiring skilled services of physician due to depth of embedment, size or shape of object(s), or location of wound.	Removal of foreign bodies from wound by tweezers or other simple techniques.
Fractures	Where X-ray results are *positive*. Application of a cast or other professional means of immobilizing injured part.	Where X-ray taken as a precaution is *negative* for fracture.
Strains, sprains, dislocations Any strain, sprain, or dislocation is recordable if it results in restriction of work (lost workdays) or in the worker's normal range of motion, whether or not medical treatment is rendered.	Application of a cast or other professional means of immobilizing injured part.	Use of an elastic (Ace) bandage on a strain that is not otherwise recordable. Use of hot or cold compresses, heat or whirlpool treatments for a strain that is not otherwise recordable.
Thermal or chemical burns Any burn is recordable if it results in restriction of work (lost workdays) or in the worker's normal range of motion, whether or not medical treatment is rendered.	Treatment of any extensive first degree burn, most second and third degree burns by surgical debridement, series of soaks, application of prescription medications.	Doctor visit for a minor burn that is not otherwise recordable. Treatment limited to cleaning, flushing surface, cold compresses, antiseptics and/or nonprescription medications.

CAL/OSHA RECORDKEEPING GUIDELINES--MEDICAL TREATMENT AND FIRST AID

Nature of injury	Medical treatment	First aid
Bruises, contusions		
Any bruise is recordable if it results in any restriction of work (lost workdays) or in the worker's normal range of motion, whether or not medical treatment is rendered.	Treatment of a bruise by draining collected blood.	Soaking or application of cold compresses to a bruise that is otherwise not recordable.

Miscellaneous procedures

Tetanus shots, either initial shots or boosters, are considered preventive in nature and are *not* considered medical treatment.

An *X-ray* which is negative for fracture is *not* considered medical treatment.

Hospitalization for observation, where no treatment is rendered other than first aid, is *not* considered medical treatment. However, most injuries requiring hospitalization will result in lost workdays and will be recordable for that reason.

Whirlpool treatments, heat treatments, and similar procedures are not in and of themselves criteria for distinguishing between "medical treatment" and "first aid." The degree to which the worker's ability to do his regular job or the extent to which motion is restricted will determine recordability.

Giving worker prescriptions for drugs, other than analgesic "pain killers" constitutes medical treatment. Recommending or giving nonprescription medicines are considered first aid.

Agriculture and Services Agency
Department of Industrial Relations
Division of Labor Statistics and Research
August 1974

State of California
EMPLOYER'S REPORT OF OCCUPATIONAL INJURY OR ILLNESS

Please complete in triplicate. Retain one copy for your files and mail the remaining two copies to

(Carrier name, address)

OSHA Case or File No. _____

California law requires an employer to report within five days every industrial injury or occupational disease which: (a) Results in lost time beyond the day of injury, or (b) requires medical treatment other than first aid.

PLEASE NOTE: In addition, if death results or if the injury or illness: (a) Requires inpatient hospitalization of more than 24 hours for other than medical observation; or (b) results in loss of any member of the body; or (c) produces any serious degree of permanent disfigurement, then the nearest district office of the California Division of Industrial Safety also must be notified immediately by telephone or telegraph. This notification is not required, however, if the injury or death results from an accident on a public street or highway.

EMPLOYER

1. FIRM NAME
1A. POLICY NUMBER
2. MAILING ADDRESS (Please include city, Zip)
2A. PHONE NUMBER
3. LOCATION, IF DIFFERENT FROM MAIL ADDRESS
4. NATURE OF BUSINESS (e.g., shoe manufacturer, cabinet works)
5. STATE UNEMPLOYMENT INSURANCE ACCT. NUMBER

EMPLOYEE

6. NAME
7. SOCIAL SECURITY NUMBER
8. HOME ADDRESS (number and street, city, Zip)
8A. PHONE NUMBER
9. SEX ☐ Male ☐ Female
10. OCCUPATION (Regular job title, not specific activity at time of injury)
11. DATE OF BIRTH ___/___/___ Month Day Year
12. DEPARTMENT IN WHICH REGULARLY EMPLOYED
12A. DATE OF HIRE ___/___/___ Month Day Year
13. WAGES $_____ per week
13A. IS EMPLOYEE PAID ON COMMISSION OR PIECE WORK BASIS, OR PAID BOARD OR LODGING ALLOWANCE? ☐ Yes ☐ No
13B. UNDER WHAT CLASS CODE OF YOUR POLICY WERE WAGES ASSIGNED?
14. WHERE DID ACCIDENT OR EXPOSURE OCCUR? (address, city and county)
15. ON EMPLOYER'S PREMISES? ☐ Yes ☐ No

INJURY OR ILLNESS

16. WHAT WAS EMPLOYEE DOING WHEN INJURED? (Please be specific. Identify tools, equipment or material the employee was using)
17. HOW DID THE ACCIDENT OR EXPOSURE OCCUR? (Please describe fully the events that resulted in injury or occupational disease. Tell what happened and how it happened. Please use separate sheet if necessary.)
18. OBJECT OR SUBSTANCE THAT DIRECTLY INJURED EMPLOYEE (e.g., the machine employee struck against or which struck him; the vapor or poison inhaled or swallowed; the chemical that irritated his skin; in cases of strains, the thing he was lifting, pulling, etc.)
19. NATURE OF INJURY OR ILLNESS AND PART OF BODY AFFECTED
20. NAME AND ADDRESS OF PHYSICIAN
21. IF HOSPITALIZED, NAME AND ADDRESS OF HOSPITAL
22. DATE OF INJURY OR ILLNESS ___/___/___ Month Day Year
23. TIME OF DAY _____ a.m. _____ p.m.
24. WAS EMPLOYEE UNABLE TO WORK ON ANY DAY AFTER INJURY? ☐ Yes, date last worked _____ ☐ No
25. HAS EMPLOYEE RETURNED TO WORK? ☐ Yes, date returned _____ ☐ No, still off work
26. DID EMPLOYEE DIE? ☐ Yes, date _____ ☐ No

PLEASE DO NOT USE THIS COLUMN

CASE NO.
EMPLOYER NO.
INDUSTRY
SEX
AGE
OCCUPATION
WEEKLY WAGE
COUNTY
ACCIDENT TYPE
AGENCY
AGENCY PART
SUPPLEMENTAL AGENCY
NATURE OF INJURY
PART OF BODY
INJURY DATE
EXTENT OF INJURY
INSURANCE CARRIER
REPORT LAG
CODED BY

Completed by (type or print)	Signature	Title	Date

Form 5020 (Rev. 3)

FILING OF THIS REPORT IS NOT AN ADMISSION OF LIABILITY

IAM Local 1781

UNION INDUSTRIAL INJURY FORM

NAME_____ DATE_____

DEPARTMENT NUMBER_____ IAM BOOK NUMBER_____

DATE OF INJURY_____ CO. PHONE EXT._____

ATTENDING PHYSICIAN_____

NATURE OF INJURY_____

_____

RECOMMENDED TREATMENT BY PHYSICIAN_____

_____

_____

NUMBER OF LOST WORK DAYS_____

COMPANIES POSITION CONCERNING INJURY_____

_____

_____

WAS WORKMAN COMPENSATION FORM FILED_____

IF SO, DATE OF FILING FORM_____

FOLLOW UP BY UNION SAFETY COMMITTEE_____

_____

_____

_____

_____

_____

FORM 74-USC-3 RETURN TO UNION SAFETY COMMITTEE

IAM Local 1781

UNION INDUSTRIAL ILLNESS FORM

NAME_____ DATE_____

DEPARTMENT NUMBER_____ IAM BOOK NUMBER_____

DATE OF ILLNESS_____ CO. PHONE EXT._____

ATTENDING PHYSICIAN_____

NATURE OF ILLNESS_____

_____

RECOMMENDED TREATMENT BY PHYSICIAN_____

_____

_____

NUMBER OF LOST WORK DAYS_____

COMPANIES POSITION CONCERNING ILLNESS_____

_____

_____

WAS WORKMAN COMPENSATION FORM FILED_____

IF SO, DATE OF FILING FORM_____

FOLLOW UP BY UNION SAFETY COMMITTEE_____

_____

_____

_____

_____

_____

FORM 74-USC-4 RETURN TO UNION SAFETY COMMITTEE

IAM Local 1781

Union Health Questionaire-For Development of Job Profile

NAME_____FILE NO._____SHOP_____DATE_____

SKILL_____MONTHS AT JOB_____NO.EMPLOYEES IN SHOP____

HAVE YOU EXPERIENCED ANY OF THE FOLLOWING WHILE AT WORK? ANSWER YES OR NO

DERMATITIS_____RASH____SORE THROAT____ FEVER____HEADACHE_____

DIZZYNESS_____UPSET STOMACH_____MISC._____

WHAT TYPE WORK WERE YOU DOING WHEN THE ABOVE SYMTOMS WERE NOTICED?_____

(if more than one occasion please expain each on back of this form)

TYPES OF MATERIALS, CHEMICALS, ETC. USED DAILY_____

TYPES OF HEALTH HAZARDS PRESENT IN SHOP_____

PROTECTIVE EQUIPMENT PROVIDED:_____

DO YOU USE IT?_____DOES YOUR FOREMAN ENFORCE USE?_____ARE YOU TRAINED IN USE?___

IS LOCAL VENTILATION PROVIDED?_____ARE SKIN HEALTH HAZARDS POSTED?_____

HAVE YOU EVER BEEN TREATED FOR JOB RELATED ILLNESS?_____WHAT WAS THE

ILLNESS?_____ WHAT DID THE DOCTOR DO?_____HOW LONG WAS TREATEMENT_____

WERE CHANGES MADE IN SHOP TO PREVENT RECURRENCE?_____

DO YOU KNOW THE HEALTH HAZARDS PRESENT IN MATERIALS YOU USE?_____

ARE YOU TRAINED IN PROPER EMERGENCY TREATMENT?_____

HAVE YOU BEEN TRAINED IN SAFETY PROCEDURES?_____WHEN?_____BY WHOM?_____

WHAT PROCEDURES?_____

DID YOUR ILLNESS(RASH,ALLERGY, ETC.) RESULT IN A JOB CHANGE?_____

WHO MADE THE DECISION?_____WHEN?_____

WHAT ARE YOU ALLERGIC TO?_____WHO DETERMINED THIS?_____

DO YOU FEEL YOU HAVE RECEIVED ADEQUATE SAFETY AND HEALTH TRAINING?_____

DO YOU KNOW OF ANY FELLOW EMPLOYEES WHO BID OUT OF THIS AREA BECAUSE OF PERSONAL HEALTH PROBLEMS?

HEALTH SCREENING QUESTIONNAIRE

P. O. BOX 2812 PHONE: 266-0811

DENVER, COLORADO 80201

S-170

Name _____
Last First Initial

Address _____
Street City, State Zip

Local # _____ Height (inches) _____ Age _____ Sex _____

Company Name _____

Job Classification _____

Cough	Yes	No
1. Have you a chest cold or running nose today?	___	___
2. Do you cough when you get up or first thing in the morning?	___	___
3. Do you cough like this on most days for as much as 3 months during the year?	___	___
4. Do you cough during the rest of the day?	___	___
5. Do you cough like this on most days for as much as 3 months during the year?	___	___
6. How many years have you had this cough?	___	___

PHLEGM PRODUCTION

1. Do you usually bring up any phlegm from your chest the first thing in the morning (on getting up? for subjects who work by night)	___	___
2. Do you usually bring up any phlegm from your chest during the day, or at night?	___	___
3. Do you bring up phlegm like this for as much as 3 months each year?	___	___
4. For how long have you brought up this phlegm?	_____	

BREATHLESSNESS

1. Do you ever get short of breath when you hurry on the level or walk up a slight hill?	___	___
2. Do you ever get short of breath walking with other people your own age at an ordinary speed on the level?	___	___
3. Do you have to stop for breath when walking at your own speed on the level?	___	___
4. Do you get short of breath when you wash or dress?	___	___

CHEST CONDITIONS

1. Have you ever had any of the following chest conditions diagnosed by a physician?		
a. Heart trouble	___	___
b. Chronic bronchitis	___	___
c. Pneumonia	___	___

		Yes	No
d.	d. Pleurisy	___	___
	e. Asthma	___	___
	f. Emphysema	___	___
	g. Pulmonary Tuberculosis	___	___
	h. Injury or operation affecting your chest	___	___

2. Are you now under the care of a doctor for any of these conditions? ___ ___

SMOKING

1. Have you ever smoked regularly? ___ ___
   (If answer is no, Please go to next section)
2. Do you now smoke? (if no, please answer next 2 questions) ___ ___
3. About how many years ago did you stop?
   Less than 5___ 5-10 ___ 11-20___ 21+___
4. Why did you stop?
   Finance_____ Doctor_____ Unwell_____ Other_____
5. If ever a smoker, please fill in the following chart:

	AMOUNT SMOKED	
	Now	Before Stopping
Average # of cigarettes/day		
Average # of cigars/week		
Average # of ounces of pipe tobacco smoked/week		

6. Do (did) you inhale? ___ ___
7. For how many years have you (did you) smoke? _____
   Less than 5___ 5-10___ 11-20___ 21+___

OCCUPATIONAL HISTORY

		Yes	No
1.	Do you work in an area so dusty that something which is clean at the beginning of the shift has a covering of dust by the end of the workday?		
	If the answer is yes, about how many hours do you spend here?	___	___
2.	Do you work with materials that irritate your nose, lungs or chest, or make you cough?	___	___
3.	How many hours per day do you work with these materials?	___	___
4.	Please list these materials.	___	___
5.	Did you ever work under the above conditions before?	___	___
	How many years? _____		
	How long ago? _____ Job classification then _____		
6.	Have you ever been badly affected by breathing gas or fumes and need medical attention?	___	___
7	How often? _____		
8.	What was the material or materials? _____		
9.	Have you any allergies?	___	___
	If so, please list them if possible _____		

-- From OCAW International Union

IAM Local 1781

SHOP STEWARDS SAFETY REPORT

LOCATION OF ACCIDENT, SAFETY PROBLEM OR CONDITION:_____

_____

SUPERVISOR CONTACTED:_____

DATE CONTACTED:_____

SHORT SUMMARY OF ACCIDENT OR PROBLEM:_____

_____

_____

_____

SUGGESTION FOR CORRECTION:_____

_____

_____

_____

SUPERVISORS ANSWER:_____

_____

_____

DATE OF ANSWER:_____

STEWARD'S SIGNATURE_____

DEPT. NO._____PHONE EXT._____

PLEASE ROUTE ONE COPY OF THIS FORM TO YOUR UNION SAFETY COMMITTEE WITHIN 72 HOURS OF INCIDENT. (USE BACK OF THIS SHEET IF MORE SPACE NEEDED)

ACTION BY SAFETY COMMITTEE:_____

_____

_____

_____

ope-3 afl-cio(89)ij

IAM Local 1781

Health and Safety Committeeman Report

Committeemen:

Please use this form for all industrial accidents and safety problems or conditions that you are having trouble getting corrected and turn in to the Union Safety Committee.

Date_____

Location of accident, safety problem or condition:_____

Foreman contacted:_____

Safety Patrolman or Steward:_____

Short Summary of Accident or Problem:_____

Use back if more space is needed.

Suggestion for Correction:_____

Action by Safety Committee:_____

Status:_____

IAM Local 1781

Health and Safety Committee

MONTHLY ACTIVITY REPORT

DEPARTMENT_____ DATE_____

COMMITTEEMAN'S NAME_____

NO. PERSONAL CONTACTS..... _____

NO. UNSAFE CONDITION REPORTS..... _____

NO. EQUIPMENT VIOLATION REPORTS..... _____

NO. UNSAFE ACTS OBSERVED..... _____

NO. UNSANITARY CONDITIONS..... _____

NO. MANAGEMENT CONTACTS..... _____

CO-OPERATIVE..... _____

UN-COOPERATIVE..... _____

REMARKS: _____

_____

_____

ope-3 afl-cio(89)ij

OCAW International Union
PLANT OPERATIONS SAFETY CHECK LIST

Walking-Working Surfaces

1.	All factory walkways properly marked and cleared	Yes	No
2.	All office area walkways cleared	Yes	No
3.	All exterior walkways cleared and in good repair	Yes	No
4.	All floor holes, floor openings, wall openings and skylights are properly guarded	Yes	No
5.	Non-slip mats, gratings, false floors and other like materials are in use in wet and other hazardous areas	Yes	No
6.	All mats, gratings, etc. are in good repair	Yes	No
7.	Floor openings, hatchways, manholes are properly guarded with covers meeting specifications	Yes	No
8.	All open sided floors, platforms and run-ways four feet or more above ground or floor level are properly guarded with toe boards installed	Yes	No
9.	All railings and toe boards meet specifications and are in good repair	Yes	No
10.	All elevated load-bearing floors and roofs are conspicuously posted reflecting safe load limits	Yes	No
11.	All other load-bearing surfaces are properly installed, in good repair, with load capacity clearly marked	Yes	No

Stairs and Stairways

1.	All stairways (other than fire exits) and elevator and escalator shafts are clear, handrails and/or guardrails provided treads and risers in good repair with non-slip surface and adequate illumination	Yes	No

Ladders and Scaffolds

1.	All ladders (except fixed ladders) equipped with safety feet	Yes	No
2.	All ladders in good condition; wooden ladders maintained unpainted	Yes	No
3.	Precautions are taken to prevent the use of metal ladders where there is possibility of electrical shock	Yes	No

Ventilation

1.	All work areas appear to be properly ventilated; no accumulation of smoke, dust, etc., was noted	Yes	No
2.	Temperature, humidity and air movement in all work areas apparently within comfort limits	Yes	No

Life Safety

1.	Location and easy accessibility of at least two fire emergency exits (minimum requirement) for each work area confirmed with special attention to high hazard area	Yes	No
2.	Each fire emergency exit is properly marked and illuminated	Yes	No
3.	Is the route to safety clear and unobstructed from the fire doors?	Yes	No
4.	All fire emergency doors swing in the direction of exit travel	Yes	No
5.	Fire emergency doors cannot be locked from inside, each is equipped with panic or other simple type of releasing device	Yes	No

PLANT OPERATIONS SAFETY CHECK LIST

Fire Suppression Equipment

1.	Does this facility have a volunteer fire brigade?	Yes	No
2.	Are there regular training sessions being conducted?	Yes	No
3.	All portable fire extinguishers are readily accessible, properly located and show servicing is up-to-date; maximum travel distance for all units not in excess of 75 ft. or 50 ft. in hazardous areas	Yes	No
4.	Each extinguisher has been checked for its adaptability to the hazard presented in the immediate area	Yes	No
5.	Clearance of 36 in. maintained between sprinkler deflectors and top of stored material	Yes	No
6.	All fire hoses in proper position and appear to be in good condition	Yes	No
7.	Where manual fire alarm boxes are used, each is accessible from maximum travel distance of 200 ft.; the travel path unencumbered	Yes	No
8.	Where fire control systems are used which are a hazard in themselves, appropriate warnings of such hazard are posted	Yes	No
9.	All potential sources of fire and/or explosion from gases, vapors, fumes, dusts and mists inspected for correctable hazards	Yes	No

Electrical Wiring, Apparatus and Equipment

1.	Clearly illustrated instructions for resucitation of persons suffering from electrical shock are posted in all electrical stations, switchboards and transformers, entrance restricted to authorized persons	Yes	No
2.	Procedures for de-energizing electrical circuits reviewed for effectiveness	Yes	No
3.	Examine extension cords and other temporary wiring for breaks, fraying or other defects	Yes	No
4.	All interior wiring systems have grounded conductors continuously identified throughout the plant's electrical system	Yes	No
5.	Electrical equipment operating between 50 and 600V are protected against accidental contact by an approved cabinet or other enclosure	Yes	No
6.	Insulation mats and protective gear are provided in all areas where more than 150 V to ground are necessarily exposed within eight feet from the floor	Yes	No
7.	Sufficient access and working space is provided and maintained about all electrical equipment for ready and safe operation	Yes	No
8.	Each electrical outlet box is provided with a cover which effectively protects against the hazard from accidental contact	Yes	No
9.	Inspection reveals instructions for disconnection are attached to each electrical motor and appliance	Yes	No

PLANT OPERATIONS SAFETY CHECK LIST

Electrical Wiring, Apparatus and Equipment

10. All portable electrical tools are equipped with hand-operated switches which are manually held in the closed position all electrical cables in good condition Yes No
11. In locations where dust collects on electric motors causing potential ventilation deficiency, suitable type of enclosed motor is used Yes No
12. In battery rooms, provision has been made for diffusion of gases to prevent the accumulation of an explosive mixture Yes No

Industrial Sanitation

1. Toilet facilities meet the following standards:
   (a) Separate facilities are provided for each sex Yes No
   (b) All are within 200 ft. of the work area where practicable Yes No
   (c) The number of facilities for each onform to standard Yes No
   (d) Toilet rooms are clean, adequately lighted and ventilated Yes No
2. Dressing rooms, where required, are clean, adequately lighted and equipped with individual clothes facilities Yes No
3. Lavatories are provided in appropriate numbers with hot and cold water, individual hand towels, and are maintained in good repair; lavatory area is clean and well lighted Yes No
4. Drinking fountains are installed within 200 ft. of all work areas; they are clean and maintained in good working condition Yes No
5. Outlets for non-potable water are clearly marked to indicate that the water is not for human use and/or consumption Yes No
6. There are no cross-connections, open or potential, between a potable and non-potable water supply Yes No
7. Receptacles for waste are adequate in design and number; they are leak-proof, well maintained and serviced regularly Yes No
8. Adequate control over insects, rodents and vermin Yes No
9. The lunch room is adequate in size, clean, well maintained and physically separated from areas offering the hazard of exposure to toxic materials Yes No
10. All good is properly stored, refrigerated where appropriate and handled under acceptable sanitary practices Yes No
11. Vending machine areas are maintained in a good sanitary condition Yes No

Material Handling

1. All fiber rope and fiber rope slings used in material handling are in good condition; no evidence of excessive wear or visible defects Yes No
2. All wire rope and wire rope slings are in good condition; no evidence of mechanical damage, bumps, broken strands, or other visible defects Yes No
3. All chain slings, including end fastenings, are in good condition; no evidence of excessive wear or mechanical damage; all are properly stored Yes No
4. Each chain bears a current inspection tag Yes No
5. Repairs to chains are made only under qualified supervision; all are proof tested for load under the prescribed standards Yes No

PLANT OPERATIONS SAFETY CHECK LIST

Material Handling (continued)

6. All hooks and rings are being tested before being put into service with records of dates and results of such tests — Yes No
7. Inspection of all hooks reveals all in good operation; no visible defects — Yes No
8. Shackles are in good repair; no visible defects — Yes No
9. Cranes and hoists are in good operating condition; regular schedule for servicing maintained; no visible defects, inspection records properly maintained, proper operating procedures are followed — Yes No
10. All industrial trucks are equipped with warning devices; all are equipped with overhead guards — Yes No
11. All industrial trucks, other than electrical-powered are re-fueled only in fire-safe areas specifically designated for that purpose — Yes No
12. All L P gas-powered industrial trucks are properly stored away from underground entrances or elevator shafts to avoid the hazard of explosion — Yes No
13. In refueling operations, all engines are stopped; smoking is prohibited — Yes No
14. Where electric batteries are recharged, facilities are provided for flushing and neutralizing spilled electrolite, for fire protection, and adequate ventilation is provided for dispersal of gas emanating from batteries — Yes No
15. The load capacity is indicated on each truck and is strictly observed — Yes No
16. All conveyor systems in good operating order; no visible defects; adequate clearance from aisles and walkways; stopping devices adequate in number and location — Yes No

Hand and Portable Powered Tools

1. All hand and portable power tools are in good operating condition; no defects in wiring; equipped with ground wires — Yes No
2. All portable equipment is equipped with necessary guarding devices — Yes No
3. All compressed air equipment used for cleaning operations is regulated at 30 psi or less; chip guarding and personal protective equipment is provided — Yes No

Machine Guarding and Mechanical Safety

1. Every production machine has been inspected as to the following items, all found to be in satisfactory operating conditions:
   (a) Cleanliness of machine and area — Yes No
   (b) Securely attached to floor — Yes No
   (c) Operations guarded — Yes No
   (d) Illumination — Yes No
   (e) Effective cut-off devices — Yes No
   (f) Noise level — Yes No
   (g) Adjustment — Yes No
   (h) Tripping mechanism — Yes No
   (i) Material flow — Yes No

PLANT OPERATIONS SAFETY CHECK LIST

Material Hazards

1. All hazardous gases, liquids and other materials are properly labeled and stored	Yes	No
2. Areas where hazardous materials are in use are fire-safe and restricted to authorized employes	Yes	No
3. Where x-ray is used, the area is properly shielded and dosimeters are used and processed for all authorized employes	Yes	No
4. Protective clothing is worn by employes when oxidizing agents are being used	Yes	No
5. All hazard areas are posted with NO SMOKING signs	Yes	No
6. All areas where caustics or corrosives are used have been provided adequately with eye fountains and deluge showers	Yes	No

Material Storage

1. All material is stored so as not to create either a fire hazard or a safety hazard to personnel	Yes	No
2. All commodities shall be stored, handled and piled with due regard for their fire hazard characteristics	Yes	No
3. Outside storage of material is maintained at least 15 ft. from an exterior wall	Yes	No
4. Outside storage areas are in good condition; weeds and grass under control	Yes	No

Surface Preparation, Finishing and Preservation

1. All spray and dip painting areas are properly shielded, adequately ventilated and well-maintained; equipped with non-explosive electrical equipment	Yes	No
2. All dip operations are provided with an automatic fire extinguishing system; adequate first aid supplies and equipment are in immediate area	Yes	No
3. All spray booths are of adequate construction with a 3 ft. clearance area surrounding each	Yes	No
4. Face shields and other protective equipment are provided in steam cleaning operations	Yes	No
5. All abrasive blasting area properly shielded; no evidence of leakage of shot; operators have adequate protective equipment	Yes	No
6. All drying equipment is properly controlled, vented and maintained	Yes	No

Personal Protective Equipment

1. Adequate protective clothing and equipment is required for all hazardous operations	Yes	No
2. All protective clothing and equipment is properly stored for ready use	Yes	No

PLANT OPERATIONS SAFETY CHECK LIST

Welding Cutting, Heating and Brazing

1.	All compressed gases are stored and used according to standards	Yes	No
2.	Welding operations are properly screened	Yes	No
3.	Fire watchers are designated where required	Yes	No

Medical Facilities and Records

1.	The dispensary as equipped, the availability of professional or trained personnel, and the maintenance of records conform to corporate minimum standards and are in compliance with OSHA Standards	Yes	No

CONSTRUCTION SAFETY CHECKLIST

Note: The following checklist covers approximately 90 percent of OSHA's construction standards but should not be regarded as a substitute for the Federal Register. The checklist soon will be available as an OSHA *pamphlet. Watch* JOB SAFETY & HEALTH *for further details.*

1. Abrasive Grinding

a. All abrasive wheel bench and stand grinders shall be provided with safety guards which cover the spindle ends, nut, and flange, and strong enough to withstand the effects of a bursting wheel.

b. Floor and bench-mounted grinders shall be provided with work rests which are rigidly supported and readily adjustable. Such work rests shall be kept at a distance not to exceed one-eighth inch from the surface of the wheel.

c. All abrasive wheels shall be closely inspected and ring-tested before mounting to ensure that they are free from defects.

2. Accident Recordkeeping Requirements

a. Within 48 hours after its occurrence, an employment accident which is fatal to one or more employees or which results in the hospitalization of five or more employees shall be reported by the employer, either orally or in writing, to the nearest OSHA Area Director.

b. Records as prescribed in the Recordkeeping Requirements booklet shall be kept for all accidents that result in a fatality, hospitalization, lost workdays, medical treatment, job transfer or termination, or loss of consciousness.

3. Air Tools

a. Pneumatic power tools shall be secured to the hose in a positive manner to prevent accidental disconnection.

b. Safety clips or retainers shall be securely installed and maintained on pneumatic impact tools to prevent them from being accidentally expelled.

c. The manufacturer's safe operating pressure for all fittings shall not be exceeded.

4. Belt Sanding Machines (Woodworking Tools)

a. Belt sanding machines shall be provided with guards at each nip point where the sanding belt runs onto a pulley.

b. The unused run of the sanding belt shall be guarded against accidental contact.

5. Boilers

Boilers provided by the employer shall be deemed to be in compliance with the requirements of this part when evidence of current and valid certification by an insurance company or regulatory authority attesting to the safe installation, inspection, and testing is presented.

6. Compressed Air, Use of

a. Compressed air used for cleaning purposes shall not exceed 30 psi and shall be used with effective chip guarding and personal protective equipment.

b. This requirement does not apply to concrete form, mill scale, and similar cleaning operations.

7. Compressed Gas Cylinders

a. Valve protection caps shall be in place when compressed gas cylinders are transported, moved, or stored.

b. Cylinder valves shall be closed when work is finished and when cylinders are empty or are moved.

c. Compressed gas cylinders shall be secured in an upright position at all times, except when cylinders are actually being hoisted or carried.

d. Cylinders shall be kept at safe distance or shielded from welding or cutting operations. Cylinders shall not be placed where they can contact an electrical circuit.

e. Oxygen and fuel gas regulators shall be in proper working order while in use.

8. Conveyors

a. Conveyor systems shall be equipped with an audible warning signal which can be sounded immediately before starting up the conveyor.

b. Where conveyors pass over work areas or aisles, guards shall be provided to protect employees from falling material.

c. Conveyors shall be in compliance with ANSI B20.1—1957, "Safety Code for Conveyors, Cableways, and Related Equipment."

9. Cranes and Derricks

a. The employer shall comply with the manufacturer's specifications and limitations.

b. Rated load capacities, recommended operating speeds, and special hazard warnings or instructions shall be posted on all equipment and visible from the operator's station.

c. Equipment shall be inspected before each use and all deficiencies corrected before further use.

d. Accessible areas within the swing radius of the revolving superstructure shall be barricaded.

e. Except where electrical distribution and transmission lines have been de-energized and visibly grounded at point of work, or where insulating barriers not a part of or an attachment to the equipment or machinery have been erected to prevent physical contact with the lines, no part of a crane or its load shall be operated within 10 feet of a line rated 50 kV or below. For lines rated over 50 kV, the minimum clearance is 10 feet + 0.4 inches for each kV over 50, or twice the length of the line insulator, but never less than 10 feet.

10. Disposal Chutes

a. Whenever materials are dropped more than 20 feet to any exterior point, an enclosed chute shall be used.

b. When debris is dropped through holes in the floor without the use of chutes, the area where the material is dropped shall be enclosed with barricades not less than 42 inches high and not less than six feet back from the projected opening.

11. Drinking Water

a. An adequate supply of potable water shall be provided in all places of employment.

b. Portable drinking water containers shall be capable of being tightly closed and be equipped with a tap.

c. The common drinking cup is prohibited.

d. Unused disposable cups shall be kept in a sanitary container, and a receptacle shall be provided for used cups.

12. Electrical

a. All electrical work shall be in compliance with the 1971

National Electrical Code unless otherwise provided by OSHA regulations.

b. The noncurrent-carrying metal parts of plug-connected or portable equipment shall be grounded. Fixed equipment shall be grounded and portable tools and appliances protected by an approved system of double insulation or its equivalent.

c. Extension cords used with portable electric tools and appliances shall be the 3-wire type. Flexible cords shall be used only in continuous lengths without splices, except that suitable molded or vulcanized splices may be used where properly made, and the wire connections soldered. Worn or frayed cords shall not be used.

d. Exposed bulbs on temporary lights shall be guarded to prevent accidental contact except where bulbs are deeply recessed in the reflector. Temporary lights shall not be suspended by their electric cords unless designed for this use.

e. Receptacles for attachment plugs shall be of approved, concealed contact type with a contact for extending ground continuity and shall be so designed and constructed that the plug may be pulled out without leaving any live parts exposed to accidental contact. Where different voltages, frequencies, or types of current (a.c. or d.c.) are to be supplied by portable cords, the receptacles shall be designed so that attachment plugs are not interchangeable.

f. Each disconnecting means for motors and appliances and each service feeder or branch circuit at the point where it originates shall be legibly marked to indicate its purpose, unless located and arranged so the purpose is evident.

13. Excavating and Trenching

a. Before opening any excavation, efforts shall be made to determine if there are underground utilities in the area, and they shall be located and protected during the excavation operations.

b. The walls and faces of all excavations and trenches in which employees are exposed to danger from moving ground shall be guarded by a shoring system, sloping of the ground, or some other equivalent means.

c. In excavations which employees may be required to enter, excavated or other material shall be effectively stored and retained at least two feet or more from the edge of the excavation.

d. Daily inspections of excavations shall be made by a competent person. If evidence of possible cave-ins or slides is apparent, all work in the excavation shall cease until the necessary precautions have been taken to safeguard the employees.

e. Trenches more than four feet deep shall have ladders or steps located so as to require no more than 25 feet of lateral travel.

14. Explosives and Blasting

a. Only authorized and qualified persons shall be permitted to handle and use explosives.

b. Explosive material shall be stored in approved facilities as required by provisions of the Internal Revenue Service regulations published in 26 CFR 181, "Commerce in Explosives."

c. Smoking and open flames shall not be permitted within 50 feet of explosives storage magazines.

d. Procedures that permit safe and efficient loading shall be established before loading is started.

15. Eye and Face Protection

a. Eye and face protection shall be provided when machines or operations present potential eye or face injury.

b. Eye and face protective equipment shall meet the requirements of ANSI Z87.1—1968, "Practice for Occupational and Educational Eye and Face Protection."

c. Employees involved in welding operations shall be furnished proper filter lens shade members.

d. Employees exposed to laser beams shall be furnished suitable laser safety goggles which will protect for the specific wave length of the laser and be of optical density (O.D.) adequate for the energy involved.

16. Fire Protection

a. A fire fighting program is to be followed throughout all phases of the construction and demolition work involved. It shall provide for effective fire fighting equipment to be available without delay and designed to effectively meet all fire hazards as they occur.

b. Fire fighting equipment shall be conspicuously located and readily accessible at all times and be maintained in operating condition.

c. Carbon tetrachloride and other toxic vaporizing liquid fire extinguishers are prohibited.

d. If the building includes the installation of automatic sprinkler protection, the installation shall closely follow the construction and be placed in service as soon as applicable laws permit, following completion of each story.

17. Flagmen

a. When signs, signals, and barricades do not provide necessary protection on or adjacent to a highway or street, flagmen or other appropriate traffic controls shall be provided.

b. Flagmen shall be provided with and shall wear a red or orange warning garment while flagging. Warning garments worn at night shall be reflectorized material.

18. Flammable and Combustible Liquids

a. Only approved containers and portable tanks shall be used for storage and handling of flammable and combustible liquids.

b. No more than 25 gallons of flammable or combustible liquids shall be stored in a room outside an approved storage cabinet. No more than 60 gallons of flammable or 120 gallons of combustible liquids shall be stored in any one storage cabinet. No more than three storage cabinets may be located in a single storage area.

c. Inside storage rooms shall be constructed to meet the required fire-resistive rating for their use. Where an automatic extinguishing system is provided, the system shall be designed and installed in an approved manner. Materials which react with water and create a fire hazard shall not be stored in the same room with flammable or combustible liquids. Electrical wiring and equipment located in inside storage rooms shall be approved for Class 1, Hazardous Locations. Every inside storage room shall be provided with either a gravity or a mechanical exhausting system. In every inside room, one clear aisle, at least three feet wide, shall be maintained.

d. Storage of containers (not more than 60 gallons each) shall not exceed 1,100 gallons in any one pile or area. The storage area shall be graded to divert possible spills away from buildings or other exposures, or shall be surrounded by a curb or earth dike. Storage areas shall be free of weeds, debris, and other combustible material not necessary to the storage.

e. Flammable liquids shall be kept in closed containers when not actually in use.

f. Conspicuous and legible signs prohibiting smoking shall be posted in service and refueling areas.

19. Floor Openings, Open Sides, Hatchways, Etc.

a. Floor openings shall be guarded by a standard railing and toeboards or cover. In general, the railing shall be provided on all exposed sides, except at entrances to stairways. Temporary floor openings shall have standard railings.

b. Every open-sided floor or platform six feet or more above adjacent floor or ground level shall be guarded by a standard railing, or the equivalent, on all open sides except where there is entrance to a ramp, stairway, or fixed ladder.

c. Runways four feet or higher shall have standard railings on all open sides, except runways more than 18 inches wide used exclusively for special purposes, which may have the railing on one side omitted where operating conditions necessitate.

20. Gases, Vapors, Fumes, and Mists

a. Exposure to toxic gases, vapors, fumes, dusts, and mists at a concentration above those specified in the "Threshold Limit Values of Airborne Contaminants for 1970" of the American Conference of Governmental Industrial Hygienists shall be avoided.

b. Administrative or engineering controls must be implemented whenever feasible to comply with threshold limit values (TLV's).

c. When engineering and administrative controls are not feasible to achieve full compliance, protective equipment or other protective measures shall be used to keep exposure of employees to air contaminants within the limits prescribed. Any equipment and technical measures used for this purpose must first be approved for each particular use by a competent industrial hygienist or other technically qualified person.

21. General Duty Clause

Hazardous conditions or practices not covered in an OSHA standard may be covered under section 5(a)(1) of the Occupational Safety and Health Act of 1970, which states: "Each employer shall furnish to each of his employees employment and a place of employment which are free from recognized hazards that are causing or are likely to cause death or serious physical harm to his employees."

22. General Requirements

a. The employer shall initiate and maintain such programs as may be necessary to provide for frequent and regular inspections of the jobsite, materials, and equipment.

b. The employer shall instruct each employee in the recognition and avoidance of unsafe conditions and in the regulations applicable to his work environment to control or eliminate any hazards or other exposure to illness or injury.

23. Hand Tools

a. Employers shall not issue or permit the use of unsafe hand tools.

b. Wrenches shall not be used when jaws are sprung to the point that slippage occurs. Impact tools shall be kept free of mushroomed heads. The wooden handles of tools shall be kept free of splinters or cracks and shall be kept tight in the tool.

c. Electrical power-operated tools shall be either approved double-insulated or properly grounded.

24. Head Protection

a. Head protective equipment (helmets) shall be worn in areas where there is a possible danger of head injuries from impact, flying or falling objects, or electrical shock and burns.

b. Helmets for protection against impact and penetration of falling and flying objects shall meet the requirements of ANSI Z89.1—1969.

c. Helmets for protection against electrical shock and burns shall meet the requirements of ANSI Z89.2—1971.

25. Hearing Protection

a. Protection against the effects of occupational noise exposure shall be provided when the sound levels exceed those shown in Table D-2 of the Safety and Health Standards when measured on the A scale of a standard sound level meter.

b. If engineering or administrative controls fail to reduce the noise level to within the levels of Table D-2 of the Safety and Health Standards, personal protective equipment shall be provided and used to reduce sound levels within the levels of the table.

c. Exposure to impulsive or impact noise should not exceed 140 dB peak sound pressure level.

d. In all cases, where the sound levels exceed the values shown in Table D-2 of the Safety and Health Standards, a continuing, effective hearing conservation program shall be administered.

e. Table D-2—Permissible Noise Exposures

Duration per day, hours:	Sound level dBA slow response
8	90
6	92
4	95
3	97
2	100
1½	102
1	105
½	110
¼ or less	115

f. Plain cotton is not an acceptable protective device.

26. Heating Devices, Temporary

a. Fresh air shall be supplied in sufficient quantities to mantain the health and safety of workers.

b. Solid fuel salamanders are prohibited in buildings and on scaffolds.

27. Hoists, Material and Personal

a. The employer shall comply with the manufacturer's specifications and limitations.

b. Rated load capacities, recommended operating speeds, and special hazards warnings or instructions shall be posted on cars and platforms.

c. Hoistway entrances shall be protected by substantial gates or bars.

d. Hoistway doors or gates shall be not less than six feet six inches high and shall be provided with mechanical locks which cannot be operated from the landing side, and shall be accessible only to persons on the car.

e. Overhead protective coverings shall be provided on the top of the hoist cage or platform.

28. Housekeeping

a. During the course of construction, alteration, or repairs, form and scrap lumber with protruding nails and all other debris shall be kept cleared from work areas, passageways, and stairs, in and around buildings or other structures.

b. Combustible scrap and debris shall be removed at regular intervals.

c. Containers shall be provided for collection and separation of all refuse. Covers shall be provided for containers used for flammable or harmful substances.

d. Wastes shall be disposed of at frequent intervals.

29. Illumination

Construction areas, ramps, runways, corridors, offices, shops, and storage areas shall be lighted to not less than the minimum illumination intensities listed in Table D-3 while any work is in progress.

Table D-3—Minimum Illumination intensities in Foot-Candles

Foot-candles:	Area or Operation
5	General construction area lighting.
3	General construction areas, concrete placement, excavation and waste areas, accessways, active storage areas, loading platforms, refueling, and field maintenance areas.
5	Indoor: warehouses, corridors, hallways, and exitways.
5	Tunnels, shafts, and general underground work areas. (Exception: minimum of 10 foot-candles is required at tunnel and shaft heading during drilling, mucking, and scaling. Bureau of Mines approved cap lights shall be acceptable for use in the tunnel heading.)
10	General construction plant and shops (e.g., batch plants, screening plants, mechanical and electrical equipment rooms, carpenter shops, rigging lofts and active storerooms, mess halls, indoor toilets, and workrooms).
30	First aid stations, infirmaries, and offices.

30. Jointers (Woodworking)

a. Each hand-fed planer and jointer with a horizontal head shall be equipped with a cylindrical cutting head. The opening in the table shall be kept as small as possible.

b. Each hand-fed jointer with a horizontal cutting head shall have an automatic guard which will cover the section of the head on the working side of the fence or gauge.

c. A jointer guard shall automatically adjust itself to cover the unused portion of the head and shall remain in contact with the material at all times.

d. Each hand-fed jointer with horizontal cutting head shall have a guard which will cover the section of the head back of the gauge or fence.

31. Ladders

a. The use of ladders with broken or missing rungs or steps, broken or split rails, or other faulty or defective construction is prohibited. When ladders with such defects are discovered they shall immediately be withdrawn from service.

b. Portable ladder feet shall be placed on a substantial base, and the area around the top and bottom of the ladder shall be kept clear. Portable ladders shall be used at such a pitch that the horizontal distance from the top support to the foot of the ladder is about ¼ of the working length of the ladder (the length along the ladder between the foot and top support). Portable ladders in use shall be tied, blocked, or otherwise secured to prevent their being displaced.

c. Portable metal ladders shall not be used for electrical work or where they may contact electrical conductors.

d. Job-made ladders shall be constructed for intended use. If a ladder is to provide the only means of access or exit from a working area for 25 or more employees, or simultaneous two-way traffic is expected, a double-cleat ladder shall be installed. Cleats shall be inset into the edges of the side rails ½ inch, or filler blocks shall be used on the rails between the cleats. The cleats shall be secured to each rail with three 10d common wire nails or other fasteners of equivalent strength. Cleats shall be uniformally spaced, 12 inches top-to-top.

32. Lasers

a. Only qualified and trained employees shall be assigned to install, adjust, and operate laser equipment.

b. Employees shall wear proper eye protection where there is a potential exposure to laser light greater than 0.005 watts (5 milliwatts).

c. Beam shutters or caps shall be utilized, or the laser turned off, when laser transmission is not actually required. When the laser is left unattended for a substantial period of time, such as during lunch hour, overnight, or at change of shifts, the laser shall be turned off.

d. Employees shall not be exposed to light intensities above: direct starting—1 micro-watt per square centimeter; incidental observing—1 milliwatt per square centimeter; diffused reflected light—2½ watts per square centimeter. Employees shall not be exposed to microwave power densities in excess of 10 milliwatts per square centimeter.

33. Liquefied Petroleum Gas

a. Each system shall have containers, valves, connectors, manifold valve assemblies, and regulators of an approved type.

b. All cylinders shall meet Department of Transportation specifications.

c. Every container and vaporizer shall be provided with one or more approved safety relief valves or devices.

d. When installed outside, containers shall be upright upon firm foundation or otherwise firmly secured. When operational requirements make use of portable containers necessary, and their location outside buildings or structures is impracticable, containers and equipment shall be permitted to be used inside buildings or structures in accordance with the Safety and Health Standards.

e. Portable heaters shall be equipped with an approved automatic device to shut off the flow of gas in the event of flame failure.

f. Storage of LPG within buildings is prohibited.

g. Storage locations shall have at least one 20-B:C rated fire extinguisher.

34. Medical Services and First Aid

a. The employer shall ensure the availability of medical personnel for advice and consultation on matters of occupational health.

b. Provisions shall be made prior to commencement of the project for prompt medical attention in case of serious injury. In the absence of reasonably accessible medical facilities, which are available for the treatment of injured employees, a person who has a valid certificate in first aid training from the American Red Cross, the U.S. Bureau of Mines, or equivalent training that can be verified by documentary evidence, shall be available at the worksite to render first aid.

c. First aid supplies approved by the consulting physician shall be readily available.

35. Motor Vehicles and Mechanized Equipment

a. Motor vehicles covered are those vehicles that operate within an off-highway jobsite, not open to public traffic. All vehicles shall have a service brake system, an emergency brake system, and a parking brake system. All vehicles in use shall be checked at the beginning of each shift to assure that all parts, equipment, and accessories affecting safe operation are free from defects and in safe operating condition.

b. No employer shall use any motor vehicle equipment having an obstructed view of the rear unless:

- the vehicle has a reverse signal alarm audible above the surrounding noise level or
- the vehicle is backed up only when an observer signals that it is safe to do so.

c. Bulldozer and scraper blades, endloader buckets, dump bodies, and similar equipment shall be either fully lowered or blocked when being repaired or when not in use. All controls shall be in neutral position with the motors stopped and brakes set, unless work being done requires otherwise. Whenever the equipment is parked, the parking brake shall be set. Equipment parked on inclines shall have the wheels chocked and the parking brake set.

36. Noise (See Hearing Protection, No. 25)

37. Personal Protective Equipment

a. The employer is responsible for requiring the wearing of appropriate personal protective equipment in all operations where the need is indicated for using such equipment to reduce the hazard to the employees.

b. Lifelines, safety belts, and lanyards shall be used only for employee safeguarding.

c. Employees working over or near water, where danger of drowning exists, shall be provided with U.S. Coast Guard-approved life jackets or buoyant work vests.

38. Power Transmission Apparatus

a. All hand and power tools and similar equipment shall be maintained in a safe condition. Belts, gears, shafts, pulleys, sprockets, spindles, drums, flywheels, chains, or other reciprocating, rotating, or moving parts of equipment shall be guarded if such parts are exposed to contact by employees or otherwise create a hazard.

b. Guarding shall meet the requirements of ANSI B15.1—1953 (R 1958), "Safety Code for Mechanical Power Transmission Apparatus."

39. Powder-Actuated Tools

a. Only trained employees shall be allowed to operate powder-actuated tools.

b. All powder-actuated tools shall be tested each day before loading to see that safety devices are in proper working condition. The method of testing shall be in accordance with the manufacturer's recommended procedure. Any tool found not in proper working order, or that develops a defect during use, shall be immediately removed from service and not used until properly repaired.

40. Radiation, Ionizing

a. In construction and related activities involving the use of sources of ionizing radiation, the pertinent provisions of the Atomic Energy Commission's Standards for Protection Against Radiation (10 CFR Part 20) relating to protection against occupational radiation exposure shall apply.

b. Any activity which involves the use of radioactive materials or X-rays, whether or not under license from the Atomic Energy Commission, shall be performed by competent persons specially trained in the proper and safe operation of such equipment. In the case of materials used under Commission license, only persons actually licensed, or competent persons under direction and supervision of the licensee, shall perform such work.

41. Railings

a. A standard railing shall consist of top rail, intermediate rail, and posts and have a vertical height of approximately 42 inches from upper surface of top rail to the floor, platform, etc.

b. The top rail of a railing shall be smooth-surfaced with a strength to withstand at least 200 pounds. The intermediate rail shall be approximately halfway between the top rail and floor.

c. A stair railing shall be of construction similar to a standard railing, but the vertical height shall be not more than 34 inches nor less than 30 inches from upper surface of top rail to surface of tread in line with face of riser at forward edge of tread.

42. Respiratory Protection

a. In emergencies, or when feasible engineering or administrative controls are not effective in controlling toxic substances, appropriate respiratory protective equipment shall be provided by the employer and shall be used.

b. Respiratory protective devices shall be approved by the U.S. Bureau of Mines or accepted by the U.S. Department of Labor for the specific contaminant to which the employee is exposed.

c. In selecting the proper respirators, the chemical and physical properties of the contaminant, as well as the toxicity and concentration of the hazardous material shall be considered. The nature and extent of the hazard, work requirements, and conditions, as well as the limitations and characteristics of the available respirators, shall also be factors considered in making the proper selection.

d. Employees required to use respiratory protective devices shall be instructed in their use.

e. Respiratory protective equipment shall be inspected regularly and maintained in good condition.

43. Rollover Protective Structures (ROPS)

a. Rollover protective structures (ROPS) apply to the following types of materials handling equipment: all rubber-tired, self-propelled scrapers; rubber-tired front-end loaders; rubber-tired dozers; wheel-type agricultural and industrial tractors; crawler-type loaders; and motor graders, with or without attachments that are used in construction work. This requirement does not apply to sideboom pipelaying tractors.

b. Above equipment manufactured before 7/1/69 is not required to have ROPS as of this printing.

44. Safety Nets

a. Safety nets shall be provided when workplaces are more than 25 feet above the surface where the use of ladders, scaffolds, catch platforms, temporary floors, safety lines, or safety belts is impractical.

b. Where nets are required, operations shall not be undertaken until the net is in place and has been tested.

45. Saws, Band (Woodworking)

a. All portions of band saw blades shall be enclosed or guarded except for the minimum arc required to allow proper retraction and contact with the work.

b. Bandsaw wheels shall be fully encased.

46. Saws, Portable Circular (Woodworking)

All portable, power-driven circular saws shall be equipped with guards above and below the base plate or shoe. The upper guard shall cover the saw to the depth of the teeth, except for the minimum arc required to permit the base to be tilted for bevel cuts. The lower guard shall cover the saw to the depth of the teeth, except for the minimum arc required to allow proper retraction and contact with the work. When the tool is withdrawn from the work, the lower guard shall automatically and instantly return to the covering position.

47. Saws, Radial (Woodworking)

Radial saws shall be installed so that the cutting head will return to the starting position when released by the operator.

48. Saws, Swing or Sliding Cut-off (Woodworking)

a. All swing or sliding cut-off saws shall be provided with a hood that will completely enclose the upper half of the saw.

b. Limit stops shall be provided to prevent swing or sliding type cut-off saws from extending beyond the front or back edges of the table.

c. Each swing or sliding cut-off saw shall be provided with an effective device to return the saw automatically to the back of the table when released at any point of its travel.

d. Inverted sawing or sliding cut-off saws shall be provided with a hood that will cover the part of the saw that protrudes above the top of the table or material being cut.

49. Saws, Table (Woodworking)

a. Circular table saws shall have a hood over the portion of the saw above the table, so mounted that the hood will automatically adjust itself to the thickness of and remain in contact with the material being cut.

b. All woodworking tools and machinery shall meet other applicable requirements of American National Standards Institute, 01.1—1961, "Safety Code for Woodworking Machinery."

50. Scaffolds

a. Scaffolds shall be erected on sound, rigid footing capable of carrying the maximum intended load.

b. Scaffolds and their components shall be capable of supporting without failure at least four times the maximum intended load.

c. Guardrails and toeboards shall be installed on all open sides and ends of platforms more than 10 feet above the ground or floor, except needle beam scaffolds and floats. Scaffolds four feet to 10 feet in height, having a minimum dimension in either direction of less than 45 inches, shall have standard guardrails installed on all open sides and ends of the platform.

d. There shall be a screen with maximum ½-inch openings between the toeboard and the top rail where persons are required to pass or work under the scaffold.

e. All planking shall be scaffold grade as recognized by grading rules for the species of wood used. The maximum permissible spans for 2 x 9 inch or wider planks are shown in the following table:

	Material				
	Full thickness undressed lumber			Nominal thickness lumber	
Working load (p.s.f.)—	25	50	75	25	50
Permissible span (ft.)—	10	8	6	8	6

The maximum permissible span for 1¼ x 9 inch or wider plank of full thickness is four feet with medium loading of 50 p.s.f.

f. Scaffold planking shall be overlapped a minimum of 12 inches or secured from movement.

g. Scaffold planks shall extend over their end supports not less than six inches nor more than 12 inches.

h. All scaffolding and accessories shall have any defective parts immediately replaced or repaired.

51. Stairs

a. Every flight of stairs having four or more risers shall be equipped with standard stair railings or standard handrails.

b. On all structures 20 feet or over in height, stairways, ladders, or ramps shall be provided.

c. Rise height and tread width shall be uniform throughout any flight of stairs, including any foundation structure used as one or more treads of the stairs.

d. Stairs of hollow pan-type treads shall be filled to the level of the nosing with solid material. The requirements shall not apply during the period of actual construction of the stairways themselves.

52. Storage

a. All materials stored in tiers shall be secured to prevent sliding, falling, or collapse.

b. Aisles and passageways shall be kept clear and in good repair.

c. Storage of materials shall not obstruct exits.

d. Materials shall be stored with due regard to their fire characteristics.

e. Weeds and grass in outside storage areas shall be kept under control.

53. Tire Cages

A safety tire rack, cage, or equivalent protection shall be provided and used when inflating, mounting, or dismounting tires installed on split rims, or rims equipped with locking rings or similar devices.

54. Toeboards (Floor and Wall Openings and Stairways)

a. Railings protecting floor openings, platforms, scaffolds, etc., shall be equipped with toeboards wherever, beneath the open side, persons can pass, there is moving machinery, or there is equipment with which falling material could cause a hazard.

b. A standard toeboard shall be at least four inches in height and may be of any substantial material, either solid or open, with openings not to exceed one inch in greatest dimension.

55. Toilets

a. Toilets shall be provided according to the following: 20 or fewer persons—one facility; 20 or more persons—one toilet seat and one urinal per 40 persons; 200 or more persons—one toilet seat and one urinal per 50 workers.

b. This requirement does not apply to mobile crews having transportation readily available to nearby toilet facilities.

56. Washing Facilities

a. The employer shall provide adequate washing facilities for employees engaged in the application of paints, coating, herbicides, or insecticides, or in other operations where contaminants may be harmful to employees. Such facilities shall be in near proximity to the worksite and shall be so equipped as to enable employees to remove such substances.

b. Washing facilities shall be in close proximity to the worksite and shall be equipped to remove all harmful substances.

57. Welding

a. The employer shall thoroughly instruct employees in the safe use of fuel gas in gas welding and cutting operations.

b. Employers shall instruct employees in the safe means of arc welding and cutting operations.

c. Proper precautions (isolating welding and cutting, removing fire hazards from the vicinity, providing a fire watch, etc.) for fire prevention shall be taken in areas where welding or other "hot work" is being done. No welding, cutting, or heating shall be done where the application of flammable paints, or the presence of other flammable compounds, or heavy dust concentrations creates a fire hazard.

d. Arc welding and cutting operations shall be shielded by noncombustible or flameproof shields to protect employees from direct arc rays.

e. When electrode holders are to be left unattended, the electrodes shall be removed and the holders shall be so placed or protected that they cannot make electrical contact with employees or conducting objects.

f. All arc welding and cutting cables shall be completely insulated and free from repair or splices within 10 feet from the electrode holder. Defective cables shall be repaired or replaced.

g. Fuel gas hose and oxygen hose shall be easily distinguishable from each other. The contrast may be made by different colors or by surface characteristics readily distinguishable by the sense of touch. Oxygen and fuel gas hoses shall not be interchangeable. A single hose having more than one gas passage shall not be used.

h. General welding, cutting, and heating operations (not involving conditions and materials described in Safety and Health Standards) may normally be done without mechanical ventilation or respiratory protective equipment. But where, because of unusual physical or atmospheric conditions, an unsafe accumulation of contaminants exists, suitable mechanical ventilation or respiratory protective equipment shall be provided.

i. Employees performing any type of welding, cutting, or heating shall be protected by suitable eye protection equipment in accordance with the requirements of the Safety and Health Standards.

j. General mechanical or local exhaust ventilation shall be provided whenever welding, cutting, or heating is performed in a confined space. When sufficient ventilation cannot be obtained without blocking the means of access, employees in the confined space shall be protected by air line respirators, and an employee on the outside of such a confined space shall be assigned to maintain communication with those working within it and to aid them in an emergency.

k. See also Compressed Gas Cylinders, No. 7.

58. Wire Ropes, Chains, Ropes

a. Wire ropes, chains, ropes, and other rigging equipment shall be inspected prior to use and as necessary to assure their safety. Defective gear shall be removed from service.

b. Job or shop hooks and links, or makeshift fasteners, formed from bolts, rods, etc., or other such attachments, shall not be used.

c. When U-bolts are used for eye splices, the U-bolt shall be applied so that the "U" section is in contact with the dead end of the rope.

d. When U-bolt wire rope clips are used to form eyes, the following table shall be used to determine the number and spacing of clips.

NUMBER, SPACING OF U-BOLT WIRE ROPE CLIPS

Improved plow steel, rope diameter inches	Number of Clips		Minimum spacing (inches)
	Drop forged	Other material	
½	3	4	3
⅝	3	4	3¾
¾	4	5	4½
⅞	4	5	5¼
1	5	6	6
1⅛	6	6	6¾
1¼	6	7	7½
1⅜	7	7	8¼
1½	7	8	9

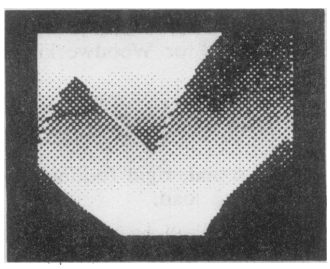
59. Woodworking Machinery

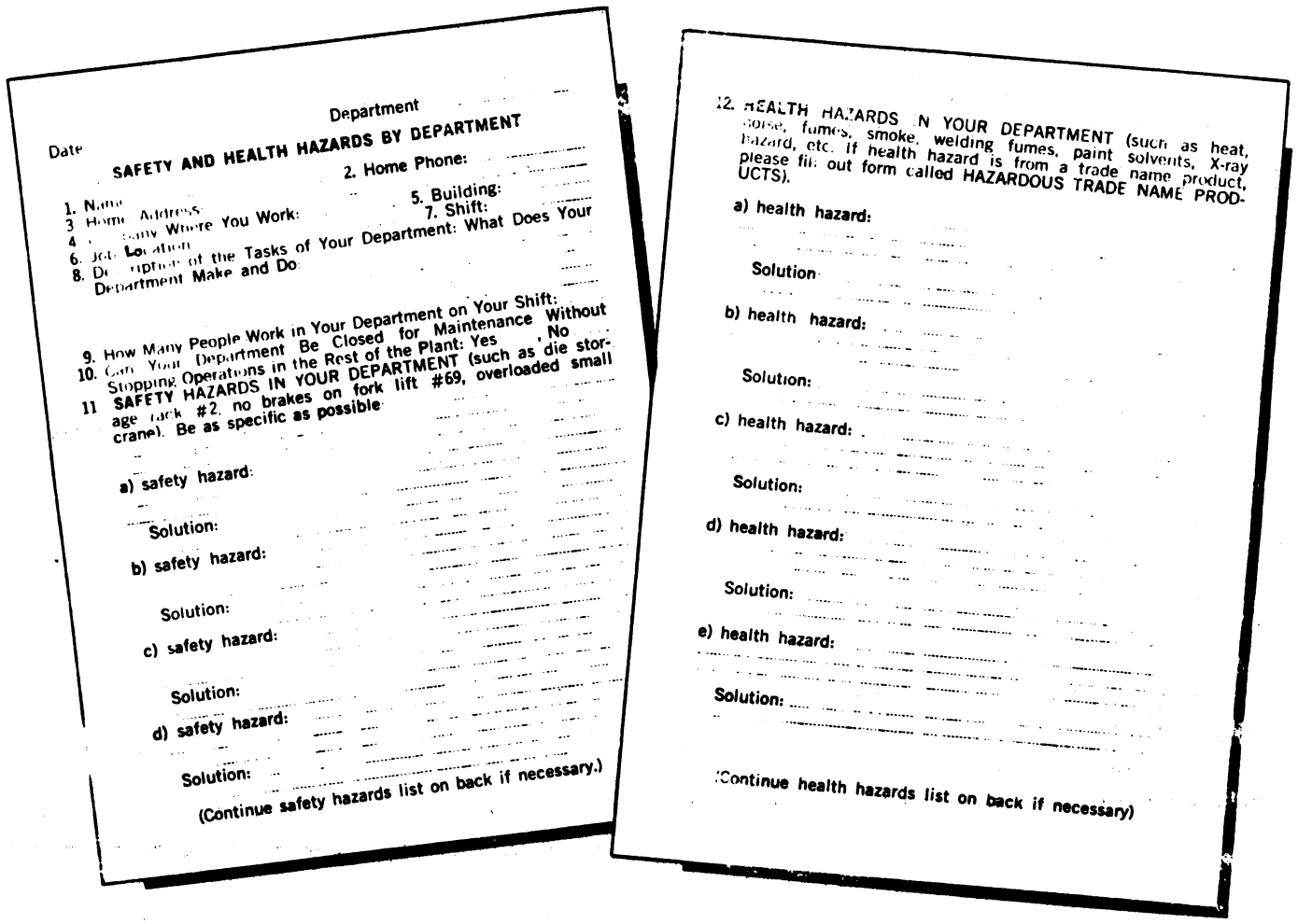
a. All fixed power-driven woodworking tools shall be provided with a disconnect switch that can either be locked or tagged in the off position. Operating speed shall be etched or otherwise permanently marked on all circular saws over 20 inches in diameter or operating at over 10,000 peripheral feet per minute.

b. Automatic feeding devices shall be installed on woodworking machines whenever the nature of the work will permit.

c. All portable, power-driven circular saws shall be equipped with guards above and below the base plate or shoe.

d. All personal protective equipment provided for use shall conform to the Safety and Health Regulations.





Date Department

SAFETY AND HEALTH HAZARDS BY DEPARTMENT

1. Name 2. Home Phone:
3. Home Address
4. Company Where You Work: 5. Building:
6. Job Location 7. Shift:
8. Description of the Tasks of Your Department: What Does Your Department Make and Do

9. How Many People Work in Your Department on Your Shift:
10. Can Your Department Be Closed for Maintenance Without Stopping Operations in the Rest of the Plant: Yes No
11. **SAFETY HAZARDS IN YOUR DEPARTMENT** (such as die storage rack #2, no brakes on fork lift #69, overloaded small crane). Be as specific as possible

a) safety hazard:

Solution:

b) safety hazard:

Solution:

c) safety hazard:

Solution:

d) safety hazard:

Solution:

(Continue safety hazards list on back if necessary.)

12. **HEALTH HAZARDS IN YOUR DEPARTMENT** (such as heat, noise, fumes, smoke, welding fumes, paint solvents, X-ray hazard, etc. If health hazard is from a trade name product, please fill out form called **HAZARDOUS TRADE NAME PRODUCTS**).

a) health hazard:

Solution

b) health hazard:

Solution:

c) health hazard:

Solution:

d) health hazard:

Solution:

e) health hazard:

Solution:

(Continue health hazards list on back if necessary)

Date: _____ _____

Trade Name of Product

HAZARDOUS TRADE NAME PRODUCTS

(Use one sheet for each product, fill in as much as possible)

1. Name: _____
2. Company where you work: _____ 3. Shift: _____
4. Department where product is used: _____
5. Manufacturer of product: _____
6. Complaints of workers handling this product: _____
7. Chemical composition of product as listed on label (if you find it easier, rip off label and clip to this form): _____
8. Safety and health warnings on label (quote or attach label to this form): _____
9. How does this product arrive in your department (50 pound plastic sacks, conveyer belt, 69 gallon drum, etc.): _____
10. How often are you exposed to this product: _____
11. Has anyone had a serious accident or illness in the last 12 months which was caused by this product? If yes, give the number of people involved and explain: _____
12. How do you use this material in your department: _____
13. How would you suggest solving this problem: _____
14. How does this product bother you: breathing _____, swallowing _____, skin contact _____.
15. This product bothers you by producing: dust _____, mist _____, gas _____, fumes _____.

(Continue comments on the back if necessary.)

Name: _____ Company: _____

Date: _____ Department: _____

DEPARTMENT HAZARDOUS CONDITIONS POLL (Ask everyone in your department on your shift, using copy of chief steward's list). Teamsters Local 688, Form A-7)

1. Total number interviewed: _____
2. Which two (2) of the following conditions or substances on the job bothers you the most? (check only 2 items)
   a) heat _____
   b) noise _____
   c) smoke or dust
   d) acid fumes from passivation tank _____
   e) graphite dust _____
   f) fork lift truck exhaust _____
3. Here is a list of safety hazards we have found. Which one would you most like to see corrected?
   a) overloaded small crane #4
   b) faulty insulation on welding machine #64
   c) greasy floors in this department
   d) no fire exits by machine #32
4. CAN YOU THINK OF OTHER SAFETY OR HEALTH HAZARDS YOU WOULD LIKE TO SEE CORRECTED? (List what they say.)
   a) Safety or health hazard: _____
      Solution: _____
   b) Safety or health hazard: _____
      Solution: _____
   c) Safety or health hazard: _____
      Solution: _____
5. _____
   Solution: _____

(Continue list on the back.)

International Association of Machinists and Aerospace Workers

Air Transport Employees • Lodge 1781

June 27, 1974

Dear Brothers & Sisters,

The purpose of this letter is to inform each and every member of the actions we are taking to up grade the health and safety language in the federal laws. On May 15, 1974, Brother Fowler, chairman of L.L. 1781 Health & Safety Committee testified at the U.S. Department of Labor OSHA Standards hearing. His testimony was centered around our position that OSHA standsrds should contain blood pressure monitoring language since hypertension is the single most causative factor in all deaths and heat, stress, noise, vibration, job speed-up and harassment are all contribuatory to hypertension. A complete text of Brother Fowler's testimony as accepted into evidence by the federal court will be available in every committee room for your examination. On May 17, 1974, Brothers Fowler and Matthews attended a FAA hearing on hazardous materials, and were successful in convincing the appropriate federal agencies of the urgent need for training ramp servicemen in the handling of hazardous material. Finally on June 10, 1974, Brothers Fowler and Tranicek attended the Senate sub-committee investigation on hazardous material and Brother Fowlers' testimony (see Attached summary) was accepted into the federal record by Senator Hartke.

We will continue to work closely with other unions and special interest groups on Health and Safety related legislation and contractual language and we will keep your informed of our progress through periodic bulletins.

Fraternally,

John E. Stilwell

John E. Stilwell
President L.L. 1781
IAMAW

NOTES FROM #1058

AIR TRANSPORT LODGE #1058, IAMAW — JUNE, 1974 — EDITOR: JERRY GRAINGER

MEETING ANNOUNCEMENT

A special meeting will be held to authorize withdrawal of funds from the Emergency Fund, in order to pay the heavy legal bills the Local has incurred in fighting for our unemployment money, denied in November.

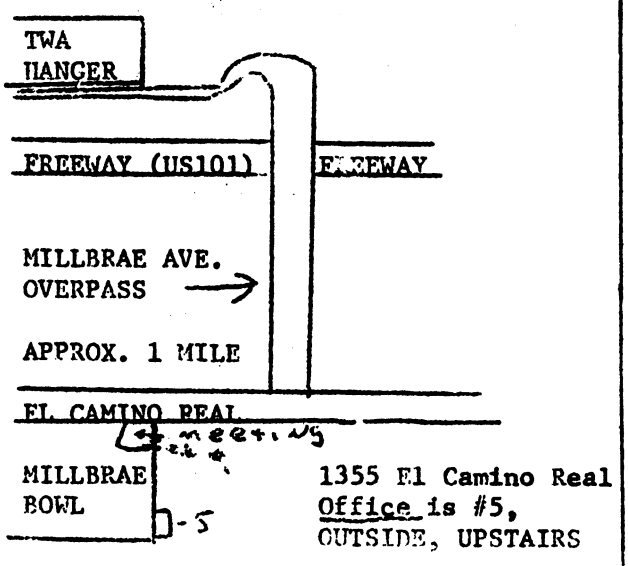
This meeting was originally scheduled for May 31, but has been postponed until the day of the Regular Business Meeting.

Meeting will be on:
THURSDAY, JUNE 13, 1974,
08:00

The Regular Business Meeting will follow. Informational Meeting at 16:00.

MILLBRAE BOWL
1355 El Camino Real

MEETINGS ARE INSIDE THE BOWL-UPSTAIRS
2nd THURSDAYS, EVERY MONTH



DISTRICT ELECTIONS THIS MONTH--VOTE, VOTE, VOTE

FROM THE SAFETY COMMITTEE

As some of you probably know, this Committee requested that the State Division of Industrial Safety - Agriculture & Services Agency, which administers CAL/OSHA, conduct an investigation of the TWA premises.

This was done only after it became apparent to the Safety Committee that unsafe/ unhealthy conditions here would not be expeditiously corrected otherwise.

Before I give a summary of the State's findings, and some of the conclusions which we arrived at, you should know something about both Federal and CAL/OSHA.

In October 1972, Federal Safety and Health standards for industry and commerce throughout the United States and its territories were signed into law, and the Safety & Health Administration of the U.S. Department of Labor was made responsible for their enforcement. This came about largely because of the efforts of the U.S. Labor Movement. Both the Act and the organization which enforces it are generally referred to as OSHA.

In 1973, The California Occupational Safety & Health Act (CAL/OSHA Assembly Bill 150) was enacted. It established Safety & Health standards and means of enforcement for industry and commerce within the tate.

On January 1, 1974, the Federal OSHA enforcement program ended; the State was to take over its functions. The Federal Department of Labor would "monitor the State program, and investigate any complaints that the State program is ineffective."

On March 11, 1974, the AFL-CIO filed a suit "seeking to enjoin the U.S. Department of Labor from approving sub-standard state plans ... The suit contends that none of the 25 approved state plans meet OSHA Act requirements and therefore are illegally approved." In particular, the Government was charg-

(CONTINUED OVER)

TRADE WINDS
IAMAW LODGE 1781

Volume XXII, No. 11 — September 1974

JOHN E. STILWELL

From The Desk of THE PRESIDENT

As those of you know that have attended general meetings over the past year and more, we have had a problem in getting Third and Fourth step grievances heard at the SFO Line area. The story of why this has happened is too long to repeat in the space available here. Thus in fairness to those whose Third and Fourth step grievances have long been on file, but unheard, the Local Committee has advised them by letter of where it stands. Over 100 such letters have gone out to the SFO Line area.

We have ried to get these grievances heard and recently had some success. Four were heard on August 14 and four more on August 16. More are now scheduled. This has been a problem for years and maybe, just maybe, we can encourage the proper officials to hear them.

* * *

Lack of retroactive checks for retired members came to my attention last month. I was appraised of this this by retired brother Andy Jackson. He had not received his retro check for the time worked September 31, 1973 to May 24, 1974.

Naturally the company blamed it on "the computer at EXO." An additional check for $95 plus $1 for each year of service is now in the mail, not only to brother Andy Jackson but **all other** retirees of that period.

* * *

The Air Freight facility has been plagued with problems for a long time; briefings, lead duties, front dock work, and more. We are getting closer to resolving these. On August 6 the Local Committee met with Station Manager Murdock and he has asked for a follow up in 30 days.

Working directly with the Station Manager rather than the individual department heads one at a time, we believe that conditions will change for the better.

* * *

On August 8, 1974, the Local Committee and the Safety committee of L. L. 1781 met with SFO airport director Mr. Bagan. Under discussion was the general subject of safety and the welfare of our Lodge members. It was first brought to the floor of a general meeting early this year.

The initial question raised by a member concerned the lack of feeling by U.A.L. towards those that become ill at work, especially on Swing and Graveyard shifts. Members have to rely on a friend being allowed by his foreman to drive the sick man home. Or the sick man has a find a spot to lie down until the end of the shift. U.A.L.'s record on this subject varies, depending entirely on the individual supervisor involved. It varies from good to bad and thus isn't good enough. What we need has not been achieved in negotiations.

L. 1781 Safety Committee were directed to look into the care and well being of those falling sick at work; and how to transport them to their homes in the nine counties in the Bay Area. The committee came to realize that costwise, more could be achieved if a larger number were to be involved. Their discussions were also widened to include complaints being received from members about airport safety in general. What could be done about that?

Thus our two committees named above met with Mr. Bagan to discuss welfare and safety for the entire airport. One result of the first meeting was a coalition meeting on August 15 of all other airline and airport employees. They will meet again soon. Mr. Bagan stated that when the coalition presents their findings to him, the results will be adopted for the entire airport.

* * *

I stated in **Speed Facts** of Aug. 20, there will be a dance on Saturday, September 14. 450 tickets only, first come, first served, at the Mainliner Club. Tickets available from brothers Buffert, Heckman, and the Local Committee. A Union band will play.

* * *

First Annual 15 and 25 year dinner dance. Our proposal to honor all those receiving 15 and 25 year I.A.M. pins was approved by the membership and arrangements are well along by Vice President Harry Heckman. Invitations were sent out and approximately 150 have now responded. Invitations were sent only to **those eligible this year.** Actually, members reaching these anniversaries receive the pins in the **16th** and **26th** years. The dinner dance will be held at the Royal Coach Inn in San Mateo. If this is your anniversary year we hope that you will reply to the invitation mailed to you.

* * *

We need your views to help make good news. Attend your meetings, drop us a line with your views or questions, or stop me when I'm in your shop or area.

Important Meetings

LOCAL LODGE 1781
at Transport Workers Hall
1523 Rollins Road, Burlingame, Calif.

* * *

DAYSHIFT and GRAVEYARD
Wednesday, September 11, 1974—**7:30 p.m.**
Reading of proposed By-Law changes.

* * *

STEWARDS EDUCATION
Wednesday, September 18, 1974—**12:30 p.m.**

* * *

SWING SHIFT
Wednesday, September 25, 1974—**12:30 a.m.**
Reading of proposed By-Law changes.

Eighth Annual L. L. 1781 - District No. 141 Golf Tournament

SUNDAY, SEPTEMBER 22, 1974
PLEASANT HILLS - SAN JOSE

Entry limited to I.A.M. members of District 141. Active, retired, or laid off but in good standing. Handicaps accepted. Trophies, balls, merchandise for the winners. Door prize winners must be present.

Closing date for entries Sept. 7, 1974. $7.50 entry includes greens fee, sandwich, beer or soft drink at 10th tee or at finish. Entry blanks from Walt Apollo, SFOPI, Swing, and Frank Potje, SFOCC, Days. Make checks payable to Frank Potje.

Josepha Cañada, Dept. 9865, where were you when we printed your number AS 6572 last month? You didn't read page 3, column 2 of Trade Winds. It was worth $10. This month the hidden number is worth $20. Pleasant reading.

Lodge By-Laws Notice

Proposed changes to L. L. 1781 By-Laws will be voted **Wednesday, October 9, 1974.**

In the July and August 'Trade Winds' it was announced that L.L. 1781 Executive Board were investigating a prescription drug plan for members. The idea is one of several being considered as a means of doing something for the membership. The very nominal response and lack of coupons returned indicates that a prescription drug plan has little support within Lodge 1781.

The Editor left his prescription glasses on Flight 119, August 11, lv. LAX at 3 A.M., window seat, L.H.S. Row 17. Unable to recover through channels. Can any cabin set-up man help?

ANNOUNCEMENT!

This is the first issue of a regular, monthly feature of the UNION NEWS devoted to matters of occupational health and safety. Publishing LIFELINES in the UNION NEWS insures that it will reach not only all of our membership but their families as well. In this way, OCAW hopes to acquaint as many people as possible with up-to-date coverage of recent findings in occupational medicine, governmental activities, health and safety happenings in OCAW, and other items of general interest.

Each issue is designed to be cut and folded into four loose-leaf sized pages which can be kept for future reference.

If you have any subjects you would like to see covered or news items for publication, send them to the Health and Safety Office by the deadline indicated on page two.

LIFELINES

OCAW HEALTH AND SAFETY NEWS

No. 1, Vol. 1 — October, 1973 **"A Healthy Environment Demands a Healthy Workplace"**

OCAW Begins Lung Testing Program

Surveys to See Effects of Jobs on Health

The International Union's Health and Safety Office is currently sponsoring a lung function testing program throughout the International. Staff of the Health and Safety Office are conducting the tests.

The test consists of various measures of lung function and a questionnaire. Smoking history, a description of job conditions, and questions relevant to various lung diseases and conditions are included in the questionnaire.

Results obtained from the test are compared to predicted or average values for normal people of the same height, age, and sex. By comparing the actual value and predicted value, the percentage of normal function can be determined.

During July, tests were conducted at Local 7-1, Whiting, Indiana; Local 7-210, Hammond, Indiana; Local 7-268, Chicago, Illinois; Local 7-507, Argo, Illinois; Local 2-24410, Climax, Colorado; and Local 2-708, Grants New Mexico; with a total of 643 members being tested. September tests included California locals 1-5, 1-128, and 1-895 as well as locals in the Cleveland, Ohio, and Alma, Michigan areas.

Preliminary results indicate that the percentage of members with decreased lung function ranges from 17% to 33% for locals participating in the program.

Although the program is presently in the pilot stage, the aim is to pinpoint jobs which may contribute significantly to decreased lung function.

Paul Jonmaire, OCAW health and safety intern, looks on as Max Slade of Grants Local 2-708 takes the pulmonary function test.

DO YOU WORK WITH LEAD?

If you work with lead, you should have a blood test to determine the extent of lead exposure. The Union now has the facilities for blood lead testing. Members or locals interested should contact the Health and Safety Office and request that a test kit be mailed to them. There will be a minimal charge of $1.50 for each test kit to cover the cost of analysis and handling.

Lead affects the brain, kidneys, nervous system, and the blood. Symptoms of lead poisoning include stomach pain, constipation, headache, weakness, muscular aches or cramps, loss of appetite, nausea, vomiting, weight loss, and anemia. In severe cases, lead palsy, an uncontrollable shaking of the hands occurs.

There are several things you can do to minimize the threat of lead contamination:

a. Lead containers should be labeled as such and should contain the chemical name of the compound.

b. Adequate ventilation should be provided and properly maintained for processes involving the use of lead.

c. Closed systems for operations involving lead are often used. A respirator should be worn in case of accidental spills.

If your plant management does not practice these safety measures, ask your Health and Safety Chairman to inquire about it at the next Health and Safety Committee Meeting.

FOR YOUR INFORMATION

There are a large variety of instruments currently available for monitoring the workplace. Each month this column will cover such instruments and other products related to worker health and safety.

Self-Reading Detector Tubes

It is often useful to make rapid on-the-spot analyses for various toxic gases or vapors in the workplace. Several portable instruments are available for this type of measurement. Although the pump design may vary, the principle used in the detectors is basically the same.

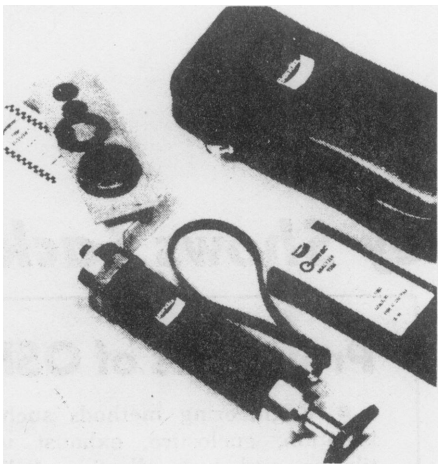
Each assembly consists of a hand-operated pump which can be a bellows, squeeze bulb, or suction type, and a detector tube. These tubes are filled with an absorbent material, and a chemical that will change color when contact is made with a particular material.

To operate the detector, air is drawn through the detector tube by means of the pump. The stain length or intensity of color change and amount of air drawn through the tube are related to the concentration of gas or vapor.

Tubes are available for a variety of contaminants and the pump can be used with all the tubes. Some contaminants for which tubes are currently available are:

Acetone	Hydrogen Sulfide
Ammonia	Nitric Acid
Benzene	Nitrogen Dioxide
Bromine	Phosgene
Carbon Dioxide	Styrene
Carbon Monoxide	Sulfur Dioxide
Carbon Tet.	Toluene
Chlorine	Trichloroethylene
Ethylene	Vinyl Chloride
Gasoline	Xylene

The advantage of this type of sampling system is that readings are taken on the spot with no laboratory analysis needed. Also, the assemblies are relatively inexpensive (approximately $80 for pump and set of tubes), and are easy to operate and read. Accuracy varies with type of tube, as do concentrations measurable with the tube.



Detector Tube Kit

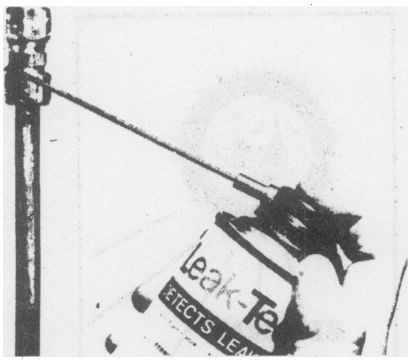
Such assemblies are available from several companies, and information can be obtained by contacting the individual company. Two such scientific manufacturers or distributors are:

Bendix Environmental Science Division.
1400 Taylor Avenue
Baltimore, Maryland 21204 (for Kitagawa Precision Gas Detector)

Scott Acme Products
1201 Kalamazoo Street
South Haven, Michigan 49090 (for Scott-Draeger Multi-Gas Detector Kit)

Leak Detector

There is a fast, safe, reliable method for locating leaks in any high or low pressure gaseous system. "Leak-Tec" is available in different formulations for a variety of uses. The area of suspected leak is covered with the formula and bubbles will form if there actually is a leak. Formulations are available for the following materials and numerous others:



One Application for Leak-Tec.

Compressed Air
Natural Gas
Nitrogen, Hydrogen, Helium
Ammonia
Carbon Monoxide
Carbon Dioxide
Chlorine

"Leak-Tec," various dispensers, and accessory equipment or price information is available from:

Leak-Tec Division
American Gas & Chemicals, Inc.
511 East 72nd Street
New York, New York 10021

LIFELINES
OCAW HEALTH AND SAFETY NEWS

Vol. 1, No. 1 **October, 1973**

Published by the OCAW Health and Safety Office in cooperation with the OCAW UNION NEWS, 1636 Champa St., Denver, Colo. 80202.

Written and edited by the staff of the Health & Safety Office
Janet Bertinuson
Sylvia Krekel
Jeanne M. Stellman

Items of interest for the November issue should be sent in by Oct. 15.

Subscription price for non-members is $3.00 per year for individual copies of LIFELINES.

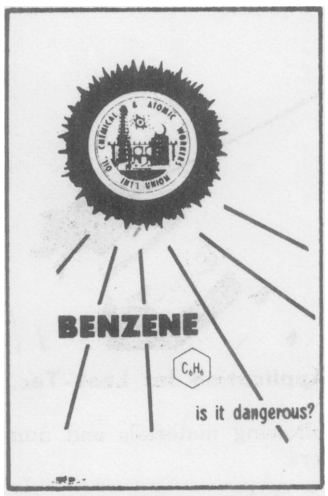
CONTEST!

Do you often pause over the advertisement for one of the Mail Order Artist's Schools? Are you a clandestine doodler, afraid to show your artistic attempts to anyone?

Here's a chance to give that artistic talent you've hidden so long an outlet, and earn some money as well. The OCAW Health and Safety Office announces a contest to design a Health and Safety symbol which will be used on all Health and Safety publications, as hard hat insignias, and on other materials related to health and safety. We invite all Union members, or members of their immediate families who want to try their hand, to submit a design to this office by Oct. 30, 1973.

A cash prize of $25, with two $10 runner-up prizes, will be awarded. In addition, the winner and the winning design will be featured in a future issue of LIFELINES.

Literature on Health and Safety Available from the International



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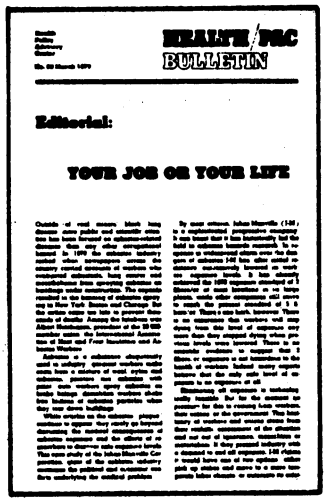
HEALTH/PAC BULLETIN

Editorial:

YOUR JOB OR YOUR LIFE

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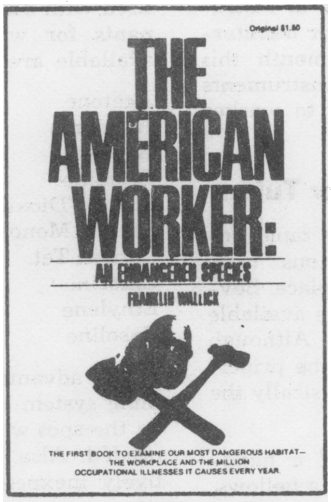

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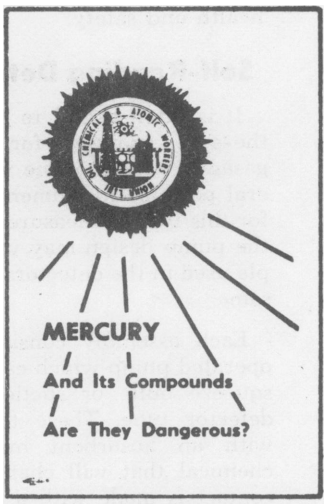

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Asbestos Survey Shows Lack of Compliance

Locals Urged to Seek Enforcement Aid

Few companies are complying with the standard set for asbestos, according to the preliminary results of a survey taken by the Health and Safety Office.

As part of the survey, the H & S office sent out a questionnaire covering such areas as physical facilities, labeling of asbestos-containing materials, air monitoring and medical records.

Of the 28 locals responding to date, four reported no contact with asbestos in the plant. Of the remaining 24, 12 answered that the company provides no special facilities for clothing or laundering, 17 reported no caution signs have been posted, and 15 replied that there was no monitoring of the air for asbestos concentrations. 50 percent of the respondents indicated that the company did not give physical examinations, chest X-rays, pulmonary function tests, or medical histories. Nor are employees being given results of exams through their personal physicians but rather orally through the company physician. In seven of the cases, no medical records are being kept at all.

Locals that feel the company is violating the asbestos standard are urged to contact the Legislative Office in Washington for aid in enforcing compliance of the Health and Safety Act.

Provisions of OSHA Asbestos Standard

- Engineering methods such as isolation, enclosure, exhaust ventilation, and dust collection shall be the prime means of control.
- Hand-operated and power-operated tools must have built-in controls.
- As far as practicable, asbestos shall be handled wet.
- No asbestos products can be removed from shipping containers without being wetted, enclosed, or ventilated.
- Respirators are to be used restrictively. No one may use a respirator if a physician has determined that one's ability to function will be impaired or that such use will threaten the safety of one's fellow employees. If respirators are used, personnel should be rotated.
- The employer must provide special clothing, change rooms, clothes lockers, or laundering.
- By December 7, 1972 every employer using asbestos shall have monitored the exposure of his employees. If the exposure is found to exceed the standard, the employer must then monitor at least once every six months.
- Affected employees, or their representative, shall be given a reasonable opportunity to observe any monitoring required . . . and shall have access to the records thereof.
- Caution signs must be posted in plants and labels attached to asbestos materials.
- Employees shall have access to the records of monitoring. If an employee is exposed to excessive concentrations, he must be informed within five days of the finding and be told what corrective actions are being taken.
- Complete physical exams and a medical history shall be given at preplacement, annually and at termination. The employer shall provide these, and the examining physician must report the results to the employer. Workers may request the results through their personal physicians.
- Such medical records must be maintained for at least 20 years.

HEALTH SCAN

A Capsule Review of Recent Literature on Consumer Products, Industrial Processes, and a General Mixture of Topical Items on Occupational Safety and Health.

"BUILD a roomful of relief" read the label on the can of Pertussin Medicated Vapor, a cold and decongestant spray. Directions said to use as often as desired, and suggested spraying entire rooms, sheets, pillows, and handkerchiefs with the preparation. There was even a *Parents* magazine seal of approval on the back of the can. Sales of the product were very good; over 30 million cans of Pertussin were sold in the last decade, according to an article in the *Los Angeles Times*.

Yet, on July 3, 1973, the Federal Drug Administration (FDA) recalled Pertussin and five other decongestants from the druggists' shelves. It seems that, since 1968, 21 deaths have been attributed to these cough remedy sprays. Of course, some of the deaths were caused by deliberate abuse — people sniffing the vapor from plastic bags to get "high"— but many of those who died merely used the spray as directed on the can.

It was not the decongestant ingredients themselves that killed these people. Menthol and oil of Eucalyptus are found in most cough and cold remedies. The killer is thought to be Trichloroethane — the chemical that was used as a solvent for the active ingredients and which reduced the vapor pressure of the propellants. Trichloroethane is an anesthetic when inhaled and disrupts normal heartbeat.

One of the most frightening aspects of the Pertussin tragedy is that the preparation was never tested by the FDA yet was classified as "generally recognized as safe" by the agency. Since there are so many products put on the market every year, the FDA does not have the manpower to test them all, and has to ultimately trust the drug companies themselves to put safe products on the market. Unfortunately, most companies are notoriously lax in self patrol.

•

Quit — Don't Switch

IF YOU are a heavy smoker and trying to quit smoking cigarettes by switching to cigars, you are probably not lessening the risk to your health.

Researchers at a London hospital measured the carbon monoxide levels in the blood of volunteers after they smoked both cigarettes and cigars. Their results showed that there was no real difference in these levels after a cigar smoking period than a cigarette smoking period. From these results, the researchers concluded that cigarette smokers who switch to cigars still inhale, contrary to popular belief.

Inhalation of cigar smoke puts the smoker at a risk for several reasons. One of these is the connection between carbon monoxide and heart disease. At levels above 5%, usually found in smokers who inhale, persons are much more likely to be affected by circulatory diseases. Also, animal tests have shown that cigar smoke is more likely to cause cancer when applied to the skin than cigarette smoke. (*The Lancet*, May 12, 1973, p. 1033)

•

Diseases of the Skin

DERMATITIS, skin cancer, and photosensitivity (when the skin becomes extremely sensitive to sunlight) can all be caused by exposure to **coal tar, pitch,** and **asphalt.**

Since exposure to these three materials is possible in a refinery, it is important for workers who may be exposed to become familiar with the protective measures that should be followed to prevent skin cancer, dermatitis, or photosensitization from developing.

Areas of direct exposure should be enclosed and exhaust ventilation, adequate to remove the materials, should be installed where possible. Washrooms with showers should be provided and time allowed so that workers can frequently wash skin during work hours and at the end of the shift. Hand creams must be provided to keep the skin from drying out. Protective work clothing should be supplied and changed daily. To be certain that harmful health effects do not go undetected, routine medical examinations should be conducted and the results made available to each worker and to his or her personal physician. (*JAMA*, June 18, 1973, p. 1654)

Beware — Shoe Polish!

BLADDER cancer in human beings is caused by a variety of aniline-type dyes. Their hazard in industry has been well documented. These compounds can enter the body in three main ways; by inhalation or breathing in, ingestion, or by absorption through intact skin.

Some of the aniline dyestuffs found in industry which are known to cause bladder cancer, are also found in the paste type shoe polishes in small amounts. Shoe polish of this type was implicated in cancer of the ureter (the tubes leading from the kidneys to the bladder) in a woman who worked as a packer in a boot polish factory.

This discovery suggests that people who are exposed to paste type shoe polish continuously may be in danger of contracting cancer of the ureter. This group would include shoe repairers, shoe polish factory workers and shoe shiners. (*JAMA*, July 30, 1973, p. 528)

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Lung Cancer

CHLOROMETHYL methyl ether (CMME) is a compound widely used in industry in organic synthesis and in the preparation of ion-exchange resins.

A study of men exposed to CMME at a chemical manufacturing plant showed an increased incidence of lung cancer over a normal population (about 8 times higher). The only common material which all the men who developed cancer worked with was CMME. All of the men were chemical operators and fumes in the building were so bad that a "good" day was when the building had to be evacuated only 3 or 4 times per shift.

Commercial CMME contains 1-7% bis chloromethyl ether (BCME) a known carcinogen. It has, therefore, been difficult to determine if CMME is the cancer cause or BCME, which is a usual contaminant.

At any rate, the findings of this study definitely implicate CMME as a carcinogen and industrial hazard. (*New England Journal of Medicine*, May 24, 1973, p. 1096)

HYGIENE AND HEALTH

HEALTH HAZARDS IN P

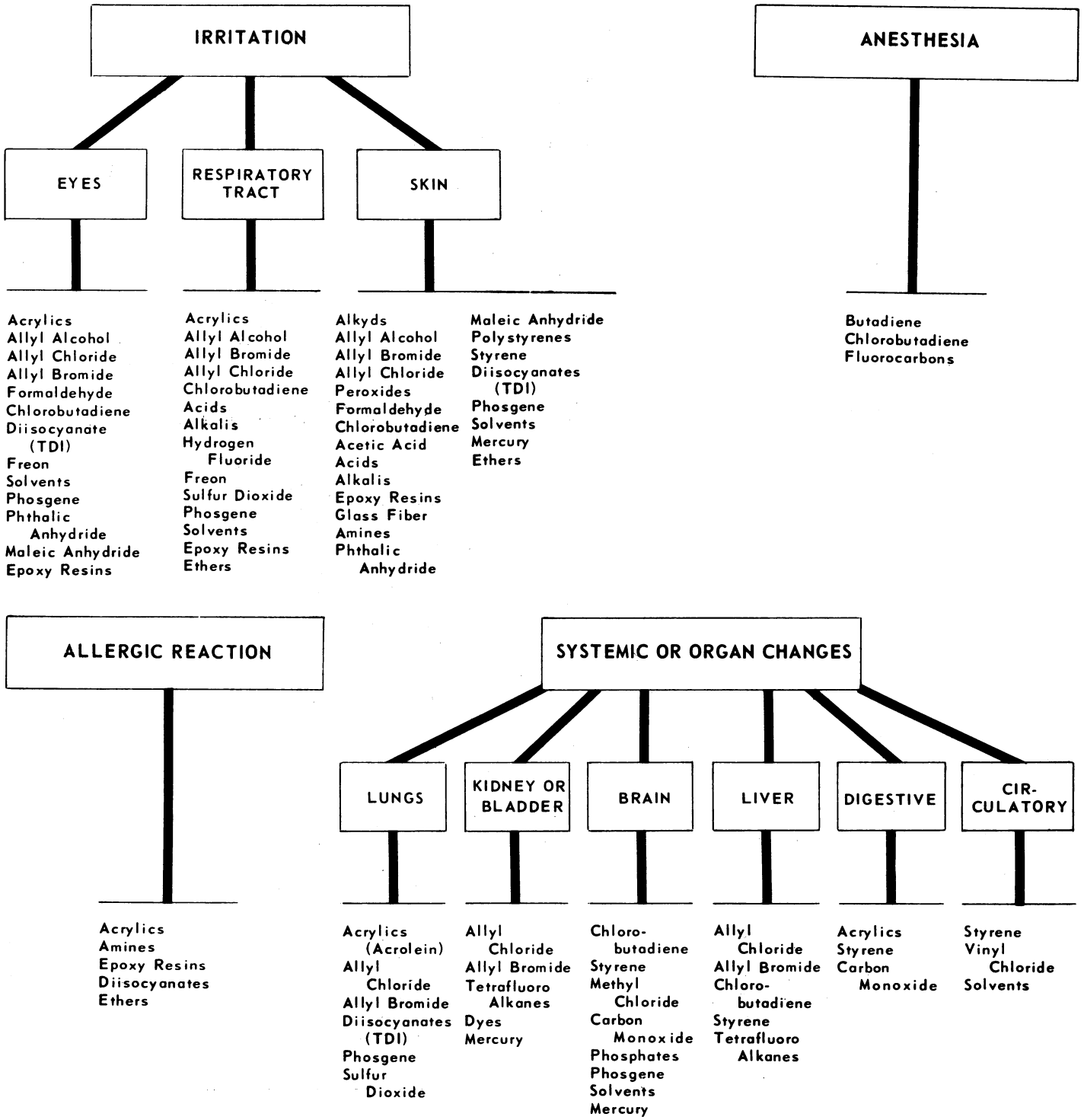
By JANET BERTINUSON, M.S

Plastics are synthetic materials which are produced by molding or forming to a final shape. Chemically, they are composed of chains of *polymers* ("many molecules"), that have been built up of simpler compounds colled *monomers.*

Plastics can be either *thermoplastic,* requiring heat to make them formable, or *thermoset,* using heat to make the shape permanent.

The finished plastics are generally inert with a moderately low order of toxicity. However, many of the other materials used in processing are quite toxic and cause a variety of health problems. These materials include stabilizers, plasticizers, curing agents, dyes, fillers and catalysts.

The substances listed in the following flow sheet are encountered not only in plastics manufacture, but in the petrochemical industry as well.



LASTICS MANUFACTURE

, OCAW Health and Safety Associate

The flow sheet (opposite page) points out some of the organs affected and reactions seen when workers are exposed to the variety of materials encountered in plastics manufacture. These effects can be of varying intensity. To illustrate the range of effects, further explanation of each area follows, with pertinent examples.

IRRITATION

A. Skin
- **Dermatitis (rash, itching, redness)**
  - glass fiber filler, epoxy resins
- **Drying**
  - Solvents
- **Burning**
  - acrolein
- **Corrosion (eating away)**
  - Amines

B. Eyes
- **Tearing, blurred vision, itching**
  - allyl alcohol vapor, styrene
- **Inflammation**
  - formaldehyde
- **Burning**
  - liquid allyl alcohol
- **Destruction of cornea**
  - chlorobutadiene

C. Respiratory Tract
- **Upper respiratory tract irritation**
  - acetic acid
  - ethers
  - freon

ANESTHESIA:

Loss of sensation produced by a chemical, usually a drug, or nervous dysfunction. Can be partial, as after novocaine administration, or general — entire body.

- **Numbness, dizziness**
  - butadiene, epoxy resins, fluorocarbons
- **Respiratory arrest**
  - butadiene (high concentrations)

ALLERGIC REACTION:

A chemical or foreign substance enters the body and combines with protein to form an *antigen*. The body produces *antibodies* to attack the antigen. There is a lag period during which no reaction is seen. If a person has become sensitized, reexposure to the substance, even in minute amounts, causes an allergic response.

- **Dermatitis (because of skin sensitization)**
  - epoxy resins, acrylics
- **Asthma-like reaction**
  - toluene diisocyanate (TDI) used in polyurethane foam manufacture
  - antibody attacks lung proteins — tissue damage results

ORGAN or SYSTEM CHANGES

A. Lungs
- **Lung infection**
  - ethylene oxide
- **Pneumonia**
  - diglycidyl ether (uncured epoxy resin)
- **Pulmonary edema (fluid in lungs)**
  - diglycidyl ether (uncured epoxy resin)
  - hydrogen fluoride
  - acetates

B. Kidney or bladder
- **Kidney injury**
  - mercury, allyl chloride
- **Bladder cancer**
  - "aniline-type" dyes

C. Brain and Nervous System
- **Headache**
  - polystyrene
  - Teflon (polytetrafluoroethylene)
- **Tremors**
  - mercury, styrene
- **Nerve Damage**
  - polystyrene
- **Psychological and Personality Changes**
  - mercury

D. Liver
- **Liver injury**
  - allyl chloride

E. Digestive
- **Nausea, appetite loss**
  - polystyrenes
  - acrylics

F. Circulatory
- **Methemoglobinemia: blood can't carry oxygen normally**
  - aniline-type dyes
- **Anemia**
  - hexamethylenediamine—starting product in nylon manufacture
- **Blood vessel changes**
  - vinyl chloride or some materials used in manufacture of polyvinyl chloride

Hot Plastics Yield Poisons

When plastics are subjected to heat they burn or smoke, emitting combustible and noncombustible gases and particulates. A recent article in *Monitor*, the magazine of the Industrial Commission of Ohio, Division of Safety and Hygiene, points out that illness and death resulting from smoke exposure may be the result of initial exposure to carbon monoxide followed by other toxic fumes.

In initial research conducted by Dr. Donald P. Dressler, a Harvard professor, it was found that less than one minute after ignition, a toxic carbon monoxide atmosphere is created by acrylics and plastics.

If a person is overcome by carbon monoxide in the early stages of a fire, and therefore is unable to leave the area, he will succumb to other toxic fumes.

The following table lists a few of the plastic decomposition products released on heating and approximate temperatures at which they are released.

Compound	Thermal Decomposition Products	Temperature (centigrade)
Phenolic Resins	Phenol, Formaldehyde	Any heating
Amino Plastics	Aldehydes	130°-200°C
	Hydrogen Cyanide Carbon Monoxide	250°-270°C
Polyvinyl Chloride	Hydrogen Chloride	450°C
	Hydrogen Methane Ethylene Ethane Benzene Toluene	350°-850C°

TRUCK DRIVING: MUST HEAL

Keep On Truckin'

In the words of some OCAW members attending the recent marketing meeting in Denver

"To be a truckdriver in America today is, in some cases, to be a human self-destruct machine," said Senator Harold Hughes of Iowa as he opened the first Senate Hearing on Amphetamine Abuse Among Truckdrivers in 1971. These were not just idle words; Senator Hughes spoke from his own experience of many years as an over-the-road driver.

"We got it written in (the contract) that we can deadline the truck. This means the truck doesn't go out of the yard. So they give you another piece of equipment. So you're gone. Then along comes Joe Blow, always a man extra, not enough trucks. First thing you pass **your** truck on the road. He's got your nice truck that's supposed to be being fixed, and you're driving a junker. So you quit turning it in."

★ ★ ★

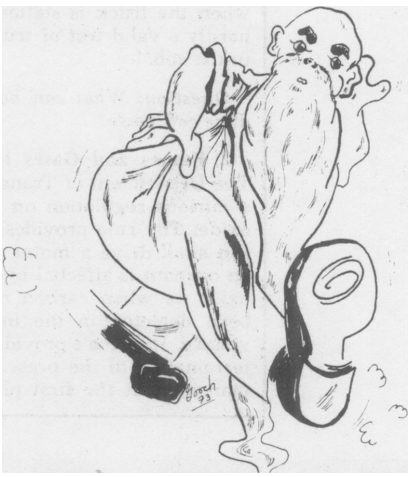
"A lot of these new aluminum rigs got no side baffle (supports) so when you go around a curve you can see that load just lay right on you."

"At our company all drivers have to put additives in. So far five men have been burned. You draw out the additives from a 55-gallon drum. You carry it out there (to the truck) and dump it in."

★ ★ ★

"The fifth wheel is sitting at least 16-18 inches past the drive axle. Now if that isn't dangerous! What it's doing is putting the weight down on the drive. So you push the weight which pins the driver. The minute that thing goes sideways that tank is going to crush him and burn him up.

★ ★ ★ ★



30 year old truckdriver with 10 years on the job . . . and he's trying to "keep on truckin'."

Who Mak

Truck drivers and the trucking industry are regulated primarily by two agencies within the **Department of Transportation.** OSHA rules apply only in the terminals.

The Bureau of Motor Carrier Safety is the agency with the most immediate jurisdiction over the driver. This agency sets work hours, rules on drug and alcohol use, and governs safety conditions such as overloading.

The National Highway Traffic Safety Administration sets manufacturing safety standards for new trucks and enforces a safety defect notification program covering existing vehicles.

Some of the more important vehicle standards are summarized below:

1. Air Brake Systems — Sets performance requirements which will shorten stopping distances and eliminate most jackknife accidents. Also provides for an emergency braking

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Air Pollution— A Constant Companion

The truck driver is also subject to air pollution in the form primarily of carbon monoxide from vehicle exhaust. Carbon monoxide decreases the blood's oxygen-carrying ability, thus starving the body's tissues of their vital oxygen. The brain, which needs the greatest amount of oxygen, is the first organ to be affected. Reflexes become slower, vision is affected and dizziness occurs. Thus, the driver not only is endangering his own health but could possibly affect the safety of others on the highway.

But, pressing as this problem of air pollution is, there have been no studies dealing with the amount of pollution in the cab or with incidence of respiratory diseases in truck drivers as a group. Since the automobile is the No. 1 air pollutant, one can imagine that the person who drives a vehicle for a living is exposed to a greater amount of pollution than the average driver and thus would be more prone to respiratory diseases. Studies urgently need to be done in this area. At present, there are no available statistics on the levels of carbon monoxide, humidity, carbon dioxide, or temperature within the truck cab.

Vibration—Another Health Factor

Truck drivers must also suffer the effects of total body vibration. Sacroiliac or low back strain is commonplace among drivers as is some kidney damage.

Vibration can cause chronic or long term lung damage because the vibrations may cause a shift in the fluid in the lungs. European studies have in-

TH BE THE UNCOUNTED TOLL?

The professional truckdriver is subjected to a myriad of physical and psychological stresses. Not only must he face the physical assaults upon his body from both the interior and exterior of the cab but, all too often, he must choose between falling asleep at the wheel or "popping" a pill to stay awake and thus risking possible addiction.

es the Rules?

system in event of failure of primary brake system. *(Effective Sept. 1, 1974.)*

2. New Pneumatic Tires — Specifies performance and labeling requirements for new pneumatic tires on vehicles manufactured after 1948. Also requires treadwear indicators in tires, and rim matching information. *(Effective Sept. 1, 1974.)*

3. Essential Controls — Headlamps and windshield wipers shall be labeled and within reach of driver restrained by lap and upper torso restraint seat belt.

4. Hydraulic Brake Systems — Must have a split brake system that can stop the vehicle under certain conditions such as hot and wet fade, partial failure, and inoperative power assist. *(Effective Sept. 1, 1975.)*

5. Accelerator Control System—Sets requirements for return of throttle to idle position when driver removes actuating force from accelerator control.

Changes *Can* Be Made

Effective legislation is one way of approaching the problems of truck drivers. OCAW can demand that emergency standards be put into effect, but to do this, specific recommendations on health and safety requirements are needed from the drivers themselves.

The following are some problem areas where questions need to be asked... and, more importantly, answered. Give them consideration and come up with some suggestions.

1. Noise Control — The recently enacted noise standard of 90 decibels will ensure that 25 percent of truckers will suffer from hearing impairment. Further, the noise level is to be measured when the truck is stationary which is hardly a valid test of true noise levels in the cab.

Question: What can be done to reduce cab noise?

2. Fumes and Gases in the Cab — The Department of Transportation has a curious regulation on carbon monoxide. The rule provides that no person shall drive a motor vehicle when an ocupant is affected by carbon monoxide or when carbon monoxide has been detected in the interior of the vehicle. It doesn't provide for any determination of the presence of carbon monoxide in the first place or define the degree to which the individual is affected.

Question: How can carbon monoxide levels be reduced? How and when should levels be measured?

3. Vibrations — Many truck drivers suffer organ damage as well as discomfort from vibrations.

Question: How can the suspension system be improved to prevent bouncing and lurching?

4. Overloading and Improper Loading — Both of these conditions can present a major safety threat.

Question: Is overloading a widespread problem at your company?

5. Maintenance — Defective equipment and faulty repairs is a senseless economy measure on the part of companies.

Question: Does your company adequately maintain its trucks? Should maintenance schedules be legislated?

The above are just a few of the problem areas. The OCAW Legislative Dept. and the Health and Safety Office urge locals to write in with suggestions and problems. If you have any specific illnesses in your experience as a truck driver, this would also be valuable to use as testimony.

dicated that performance of tasks is abnormally affected by motor vehicle vibrations. Other studies indicate that back and abdominal disorders are more pronounced in sitting than in standing persons.

Even at fairly low frequencies, vibration affects the driver's visual ability and diminishes certain of his reflexes, making him less sure of his driving capability. Aside from the definite health hazards, vibration leads to discomfort and fatigue while driving.

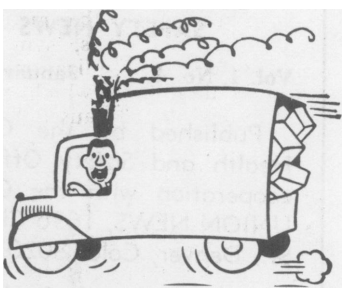
Vibration, therefore, affects the health, safety and efficiency of the driver. Prevention of excessive vibration should be remedied by proper equipment design.

Noise—Affects Hearing, Other Bodily Functions

Among the physical hazards of truck driving, noise is probably one of the most serious problems. Over 15 million people in America today suffer from a partial or total hearing loss. Permanent

hearing impairment may ocur after long-term exposure to continuous intense noise levels or to intermittent intense noise levels. The current standard of 90 decibels means that one would have to shout to be heard at a distance of an arm's length. If the standards of 90 decibels is adhered to, 25 percent of truckers can count on hearing impairment!

Noise also produces some dangerous non-auditory side effects. Noise impairs one's performance and could have serious consequences in terms of safety for the truck driver. If the noise level in the cab is too intense, the driver



will not be able to hear other vehicles honking or even the sound of approaching sirens. The driver would thus become more prone to accidents. Laboratory studies on animals have shown noise-induced non-auditory disorders such as gastrointestinal ailments, cardiovascular disease and damage to the kidneys and liver.

Material compiled and written by Sylvia Krekel, OCAW Health and Safety Office

A worker's health bill of rights

What are some of the optimum health rights which workers ought to have on their job? Gary Sellers of Ralph Nader's Center for the Study of Responsive Law (Nader's Raiders) has assembled a suggested list of health rights for workers which explains what ought to be done so nothing on the job impairs or diminishes health and longevity.

Every worker has the basic right to a job and workplace which protects his full physical, biological, social, and psychological health.

1. The Right to Protection From Job Hazards.

Every worker has the right to maximum protection from risk of illness or injury partially or wholly caused by the hazards of the work environment or the nature of his job.

2. The Right to Work Without Fear.

Every worker has the right to have maximum protection from job hazards removed by design and engineering wherever possible and to have protective equipment designed to operate with a minimum of discomfort and minimum worker responsibility.

3. The Right to Medical Information About Himself.

Every worker has the right to receive from his employer a physical examination and appropriate medical tests, treatment and full results of any diagnosis by a qualified physician of his choice: 1) at least annually, and 2) whenever his job subjects him to the risk of disease or injury through exposure to harmful agents in excess of recommended exposures or standards.

The worker must also be informed of any personal or constitutional characteristic, genetic or acquired, which may predispose to increased vulnerability to specific occupational stresses or hazards. The worker also has the right to an autopsy by a qualified "occupational pathologist," (a pathologist qualified to recognize occupational disease), and to all tissue analyses necessary to evaluate the presence of occupational morbidity.

4. The Right to Information About All Potential Job Hazards.

Every worker has the right to be informed of all potential hazards to his health and safety associated with his workplace or with the performance of his job. The worker therefore has the right to be informed of, and have easy access to all epidemiological and environmental data collected by the company or its consultants which is not medically confidential, and to all studies made with this data. The worker therefore has the right to be fully informed of the nature of all the medical illnesses, signs, syndromes, symptoms, consequences, complications, conditions and disabilities which are known or thought to be caused by, contributed to, or associated with the hazards to which the worker is potentially exposed.

5. The Right to Have Known or Fixed Dangers Clearly Described by the Employer.

Every worker has the right to a job and work environment for which and where all substances and conditions, which individually or in combination, are potentially hazardous to the worker, are measured regularly, are labeled and accompanied by warnings and instructions by the employer.

This will enable the worker and his employer to maintain full awareness of potential hazards, and should assure control of these hazards within safe limitis. Information on labels, warnings and instructions must include where possible:

a. Quantitative analysis of the contents if available;

b. A description of the conditions under which the substance, the environment, and the worker may interact to endanger the worker;

c. A description of toxic signs and symptoms;

d. A statement of emergency treatment in event of acute exposure of toxicity;

e. A statement of proper conditions and precautions for safe use;

6. The Right to Have Varied Dangers Measured Regularly.

Every worker has the right to know from his employer: 1) the measurable level of his daily exposure to potentially dangerous experiences, and 2) whenever his exposure exceeds the lowest established limits to those substances or processes.

7. The Right to Discover and Preserve a Record of Job Hazards.

Every worker has the right to photograph, measure, and document the environmental conditions and job stresses to which he is, or has been exposed. Any worker may execute this right himself or through a representative, but solely for health, safety, law suit and compensation purposes.

8. The Right to Corroboration of Information and Enforcement of Standards.

Every worker has the right to have his workplace open to inspection, measurement, evaluation, and enforceable correction by federal, state and local departments of occupational health and safety. This includes the right to know when the inspection will occur, to be informed of the total results of any such inspection report, including a copy thereof.

This also includes the right to a confidential conference with inspection personnel at a time other than during job hours, the right to request and receive an inspection by filing a complaint, and the right to submit himself to physical examination and medical tests performed by qualified government personnel, without loss of pay or fear of reprisals.

9. The Right to be Protected and to Protect Himself.

Every worker has the right not to be subjected to excess exposure to substances which have been shown to be potentially dangerous, or to any exposure to substances which have not been sufficiently tested for acute and chronic toxicity sufficient for the Department of Health, Education and Welfare to set interim standards for exposure to any substance which has not been registered with the federal government and independently studied, and a standard approved and licensed by a qualified federal health agency for safe use.

If such standards, or a worker's rights as defined above, are violated every worker so affected has the right to refuse to work or remain in a hazardous environment until it is made safe. The act in the defense of his health or safety shall not result in loss of employment, pay or benefits, constitute a contract violation, or be otherwise subject to reprisal.

10. The Right to Limit Hazardous Exposure to Working Hours.

Every worker has the right to be as clean and uncontaminated when he leaves the workplace as he is when he arrives. The worker shall have the right to whatever necessary protective clothing, protection, and hygiene facilities as are necessary to assure this right to avoid contamination by hazardous process or substances, and the means to decontaminate himself for meals between work hours and after work is completed for the day. Cleaning of contaminated work clothing shall be the responsibility of the employer.

11. The Right to Recover For Damages Resulting From Violation of Standards.

Every employee has the right, not withstanding his receiving disability compensation, to bring an action against his employer either in a court of law or in a duly constituted tribunal, for the entire value of damages resulting from injury, illness, or damage to the worker's health due in part or in whole to environmental conditions or the stresses of a job which have exceeded established health and safety standards, criteria, codes, contracts and public warnings

91ST CONGRESS
2D SESSION

H. R. 16785

A BILL

To assure safe and healthful working conditions for working men and women; by authorizing enforcement of the standards developed under the Act; by assisting and encouraging the States in their efforts to assure safe and healthful working conditions; by providing for research, information, education, and training in the field of occupational safety and health; and for other purposes.

Congress will soon be voting on a bill which can profoundly affect the safety and health of 80 million working Americans. It's H.R. 16785, which will soon go to the House of Representatives for a vote. Later a similar bill will come up in the Senate. Right now is the time to let your own Congressman and your two U.S. Senators know your feelings on this bill. Let them know you want a strong federal law which protects your life and limb on the job. This bill is an important first step toward a better work environment.

(Continued from page 2)
by government and professional departments and organizations qualified to recommend safe exposure limits for fully protecting the health and safety of workers. Any such recovery would be reduced by the amount an employees receives under any workmen's compensation award.

12. The Right to Recover the Full Value of Health Damaged by Employer Failures.

Every employee has the right, notwithstanding receiving disability or workmen's compensation, to bring an action against his employer either in a court of law or in a duly constituted tribunal, for the **full** value of damaged health if the employer failed to provide the worker any of these health rights. Any such recovery shall be reduced by any other recovery under the Workmen's Compensation law.

13. The Right to Recover for Hidden or Delayed Injuries to Health.

When a worker experiences illness, injury, disability or pathological changes impairing health, as shown by autopsy, he, or his representative in the case of his death, shall have the right, notwithstanding the passage of time, to sue for damages if his damage has resulted from previous occupational exposure.

14. The Right to Recover an Adequate Level of Workmen's Compensation for All Job Related Health Impairments.

Just as a worker is now considered to have a right to a minimum wage, so also he should receive enough workmen's compensation to support his rehabilitation and rapid re-entry back into society and which provides the maximum incentive for prevention of harm. Many present state schedules contain glaring omissions which result in thousands of workers not receiving these meritorious results. To achieve equity, and to create incentives for safety and health, some legislative **action** should be considered which will upgrade State plans to assure these benefits and coverage.

What the bill does:

H. R. 16785 is not a perfect bill; it's not the final answer to full safety and health on the job; but it is a vital first step, which sets up the basic framework within which lives and limbs can be saved, and more research into the cause and prevention of occupational disease can be accomplished.

The Secretary of Labor is given powers to set standards; these standards can be improved. Investigations and inspections can be made. Most important of all, union representatives can accompany inspectors and workers can get copies of safety reports when they are made.

Employers are required to moniter working conditions, keeping track of exposure levels for harmful chemicals, noise, gases, and toxic substances— so workers know the dangers to which they are exposed, and so employers can not force workers to work at exposure levels over the standard.

Other provisions also provide for enforcement and penalties so that the safety and health standards are maintained

Implementation of this federal law will cost employers money. Thus many employers are flooding Congress with anti-safety mail. This bill is a minimum bill for safety and health rights. Do what you can to help pass it.

FROM UAW WASHINGTON REPORT

ULCERS — Only an Executive Disease?

Whenever someone mentions the disease ulcers most people immediately think of the harried executive who has so many worries, responsibilities and problems that he develops ulcers.

But this notion is probably incorrect — ulcers is not a disease of the executive alone but is shared by many of the nation's working class men and women.

Job dissatisfaction may be one of the many real causes of ulcers among workers. Unlike the corporate executive, a worker is not given a sense of worth or value for the work he or she is doing. Too often workers are made to feel ashamed of their jobs, or to feel unneeded and unappreciated.

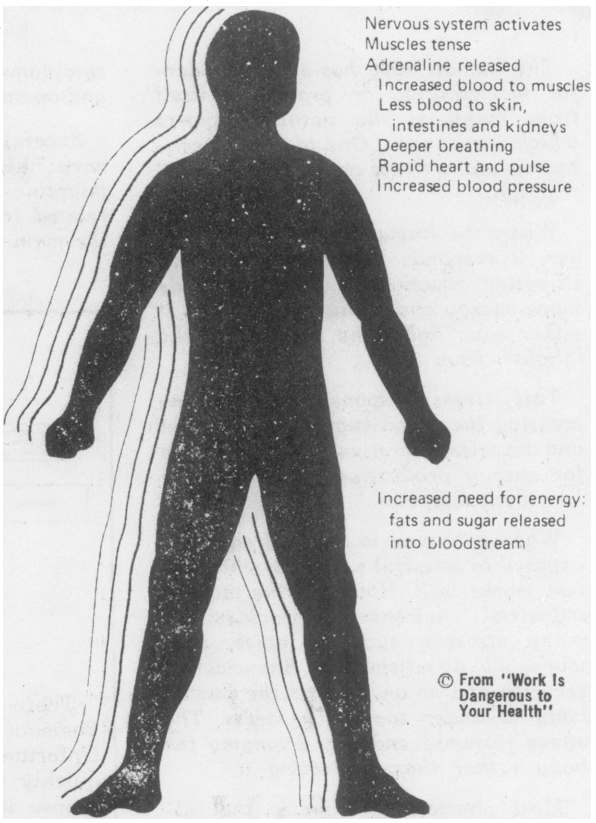
When this sense of dissatisfaction is combined with working conditions that add to the stress — noise, rotating shifts, temperature extremes, monotony, repetitive tasks, too rapid speed of work — the result can be and often is a stress disease.

Thus many workers develop ulcers, coronary heart disease, migraine headaches, ulcerative colitis and so on, but unlike the executive, these diseases will often not be attributed to the workplace and its stressful conditions.

In addition, many workers face continual and constant financial pressures. While workers are often blamed for the poor state of the nation's economy, in fact, they are among the ones to suffer the most from it. Continual debts, mortgages, inflation and job insecurity from fear of lay-offs or discharges are a serious additional source of stress for workers.

Therefore, when one looks at the varied stresses that workers face, one realizes that they are at *least* as great as those faced by the successful executive — with very few of the rewards.

So the next time ulcers is called the disease of executives, every blue collar worker should realize the truth of the situation.



Work Rate Can Affect Your Health

The rate at which people work can have a great effect on their attitude toward the job and on the amount of stress resulting from it.

If the work is repetitive and very fast, then the body will respond by becoming fatigued. The worker will become depressed, feel anxious and often very lonely. There is a sense of loss of identity.

A slower pace may be more satisfying. However if the task requires the worker's full attention yet is boring, unrewarding, and even meaningless, that worker will be stressed by the job.

If the job is very meaningless and the job rate is too slow, the worker may become so bored and disaffected that many mistakes begin to set in.

Boredom and fatigue can result in an inability and unwillingness to work, often beyond the worker's personal control and in contradiction to his or her natural personality.

Noise — Another Stress Factor

Exposure to noise can affect more than hearing. People exposed to noise show the same stress response that they do when they are suddenly scared or under emotional strain.

Exposure to noise can result in an elevated blood pressure, increased heartbeat rate and even a change in some of the chemical constituents of the body.

Some authorities believe that a worker will become accustomed to this noise and stop undergoing the stress response. Yet other researchers find that workers in noisy plants seem to have higher incidences of digestive system and heart diseases.

At the very least noise is so emotionally taxing that the worker who returns home after a noisy day on the

'nging the Blue Collar Blues

The human body has some wonderful mechanisms for protecting itself from many of the natural dangers which surround it. One of these mechanisms is the stress or "fight-or-flight" reaction.

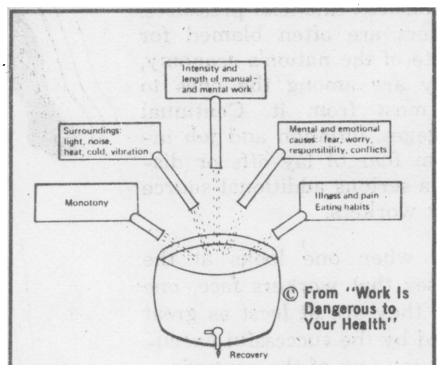
When the human body senses danger, it responds by altering the way its system functions in order to provide more energy and stimulation so that it either can "fight" the danger or take "flight" from it.

This stress response includes increasing the blood supply to the brain and muscles, secreting more adrenalin for energy production, increasing the heartbeat rate, etc.

When a human is only infrequently exposed to stressful situations, this system works well. However, the modern industrial environment provides too many stresses, such as noise, shift work, job dissatisfaction, financial insecurity and so on, so that the human body is under too much stress. The stress response ends up damaging the body rather than protecting it.

Most physicians recognize that almost all diseases have a stress component in them. That is, exposure to stress will prolong recovery, worsen symptoms, bring out new symptoms and on and on.

Several diseases such as ulcers, coronary heart disease, ulcerative colitis, migraine and asthma are often directly related to excess and undue stress as the main cause.



There are many causes of stress. Some of them are pictured above. Unfortunately, while it is easy to quickly bring about the stress response it is not so simple for the body to recover from the stress, as this illustration shows.

Job Satisfaction — What's That?

People can withstand a great deal of stress if they gain some satisfaction from it. People voluntarily undergo stress when attending football games or watching hockey matches. But when the stress has no emotional rewards, or satisfaction, illness can result.

Studs Turkel captured some of that dissatisfaction in his book *Working* in this interview with Gary Bryner, president of UAW Lordstown Local 1112.

". . . It was boring, monotonous work. I was an inspector and I didn't actually shoot the screws or tighten the bolts or anything like that. A guy could be there eight hours and there was some other boys doing the same job over and over, all day long, all week long, all year long. Years. If you thought about it you'd go stir. . . . Can you imagine squeezing the trigger of a gun while it's spotted so many times? You count the spots, the same count, the same job, job after job after job. It's got to drive a guy nuts."

job often finds himself or herself incapable of coping with the ordinary problems of day to day living.

●

Constant Fear Takes Its Toll

Another source of stress in the workplace is the continual fear of death or injury. Each year more than 18,000 American workers are killed and hundreds of thousands are permanently disabled.

Since most workers feel that they have no choice but to accept their dangerous working conditions they try to put this fear into the back of their minds.

But although the fear and insecurity may not be consciously felt, it is still there. Its presence adds to the stress of the worker on the job.

In addition, although a worker may not himself be injured or killed, often a co-worker is. This type of environment, where those around you are in danger and perhaps are suffering or dying, is an additional stress.

Finally, the very feeling that you cannot do anything about the situation, that working in danger is just part of the job can itself be very stressful and unhealthy.

One way workers can combat this situation is by working together to form stronger unions and by taking advantage of their rights as citizens entitled to safe working conditions.

When Unions and Government begin responding more to these pressing needs of workers then the stress, boredom and dissatisfaction of working can be eliminated.

SOME SIGNS OF TOO MUCH STRESS

An inability to concentrate
Trouble falling asleep and staying asleep .
Irritability
Being unusually "accident-prone"
Fatigue, often greater than expected from task being performed
Trouble with digestion; loss of appetite

SOME DISEASES ASSOCIATED WITH STRESS

Coronary Heart Disease
Asthma
Ulcers
Ulcerative Colitis
Migraine Headache

(Remember: Almost all diseases can be worsened by excess stress!)

Much of the material on this page is taken from the book Work Is Dangerous to Your Health, *by Drs. Jeanne Stellman and Susan Daum, Pantheon, 1973. (Available from the Health and Safety Office.)*

-From Lifelines (OCAW)

At Union Carbide

Checking PVC workers to detect dread disease

John Stender, Assistant Secretary of Labor and head of the Occupational Safety and Health Administration (OSHA), is now considering volumes of evidence supporting and opposing a proposed standard for working with vinyl chloride and polyvinyl chloride (PVC) resins. That standard, allowing for "no detectable levels" of vinyl chloride, is supported by labor and opposed by many industrial and management groups.

Of all the information Stender will have before him, probably the most useful could be the data gathered during four days in June, in a small West Virginia city. There in South Charleston, members of IAM Local 598, officials and employees from Union Carbide Corp., and staff members from the famed Mount Sinai School of Medicine in New York City worked together searching for answers to the frightening problems posed by working with vinyl chloride.

James Copenhaver, Local 598 rep, reports that Union Carbide and the IAM asked Dr. Irving Selikoff, director of Mount Sinai, to come to South Charleston and screen the more than 400 active workers, former employees and retirees. The check was for liver abnormalities that might lead to angiosarcoma, a deadly cancer of the liver.

Angiosarcoma has already claimed the lives of 21 PVC workers around the world. Two of the victims were 18-year veterans of PVC work at South Charleston. Carbide has been making PVC at the West Virginia plant since 1935, longer than any other plant in the USA.

The product produced by IAM members at South Charleston is Dynel. It's a synthetic fiber that is used widely in the manufacture of wigs, sleepwear and upholstery. Copenhaver adds that even before the current controversy began late last year, Union Carbide pressed for exposure levels of close to 50 parts of vinyl chloride per million parts of air. At the same time, some of the industry was loosely adhering to a 500 parts per million level.

The Mount Sinai tests averaged two and one-half hours. Workers had their chests, hands and feet x-rayed. Other tests included pulmonary functions, urinalysis and blood samples. The examinations were given on company time. If a worker was detained past quitting time, Carbide paid him time and one-half.

Dr. William Nicholson, associate professor at Mount Sinai, reports that the tests are almost all completed in the laboratories. Those results will be given to each worker and will remain confidential unless the worker approves the release. Copies of the overall findings will be sent to OSHA in time to help John Stender decide on the standard that will protect vinyl chloride workers in this country.

Machinist Photos

PVC consumer products numerous, FDA checking all, banning some

Polyvinyl chloride resins are used in a wide range of consumer products. With two notable exceptions, most of the products containing PVC, are thought not to be harmful to consumers.

One of the recently publicized exceptions is a wide variety of aerosol products, such as hair and wig spray, insect sprays, foot deodorants and sprays, anti-perspirants and deodorant sprays, first-aid sprays, and some medicated vaporizers. The Food and Drug Administration explains that the actual products do not contain PVC. The aerosol mechanism of the can uses vinyl chloride gas as a propellant. It's the propellant that's dangerous to breathe.

In another case, plastic liquor bottles containing polyvinyl chloride have been ordered off the shelves. The FDA found that the PVC combined with the alcohol. Lab studies showed as much as 20 parts per million of PVC combined with the liquor and was subsequently taken in by the consumer.

Studies are continuing by the FDA, the Environmental Protection Agency and other medical groups into possible PVC hazards in other consumer goods. Here are some of the products that use polyvinyl chloride:

- Shower curtains
- Tablecloths
- Construction pipe
- Electrical conduits
- Vinyl wall coverings
- Gaskets
- Vinyl asbestos flooring
- Steel beer cans (inside lining)
- Metal screw-on jar lids
- Swimming pool liners
- Phonograph records
- Shoes soles and heels
- Auto seat covers
- Bicycle saddles
- Salad dressing, detergent bottles
- Upholstery (coated fabric)
- Dentures
- Garden hoses
- Credit cards
- Foamed carpet padding
- Weather stripping
- Stationery (sheet separators)
- Fruit, vegetable can linings
- Latex paints and lacquers
- Vinyl house siding (especially mobile homes)
- Inflatable beach balls
- Vinyl auto tops
- Auto head and arm rests
- Food wrappers (meat, cheese, crackers)
- Baby bottles

Union Wins Right to Chemical Names

OCAW McIntosh, Ala. Local 3-562 has won a significant and far-reaching victory from Ciba-Geigy Corporation in a recent arbitration ruling. The Union won the right to be given the generic or chemical name of every substance used or produced in the plant.

The Union, concerned with the health effects of the pesticides and industrial chemicals at Ciba, had repeatedly requested lists of raw materials used, finished products made, their effects and remedies. They also requested that specific, continuous air monitoring as well as biological monitoring be carried out in the plant.

Finally, after getting nowhere with management, the Local enlisted the aid of District Director B. C. Emrick, Legislative Director Tony Mazzocchi and aide Steve Wodka, formalizing their complaints through the grievance and arbitration procedure.

In examining the contract, which contains the standard phrase that the Company shall maintain "reasonable and necessary precautions for the health and safety of its employees", the arbitor ruled that supplying generic names was a reasonable obligation, which in fact, the Union needed to begin to ask for changes in working condition. The arbitor ruled that the monitoring aspects of the grievance were premature since the Union could not demand monitoring until it knew what had to be monitored. The Local is now pursuing this avenue in its continuing health and safety program.

BIG VICTORY

This is the Health and Safety Committee of McIntosh, Ala., Local 3-562 which won the right to be given chemical names of substances in the plant. Kneeling, from left, are Roy Donald, Bobby Joe Cranford, and Valton Busby. Standing, from left: Ossie Bryars, Ted Thompson, Elmer Averett, and Local Pres. Thomas C. Johnson.

COMPARE YOUR CONTRACT

The relevant Health and Safety Provisions of the contract between McIntosh, Ala., Local 3-562 and Ciba-Geigy were:

Section 1. General Provisions — The Company shall institute and maintain all reasonable and necessary precautions for the health and safety of its employees. All employees covered by this Agreement shall cooperate in the implementation of all such reasonable and necessary health and safety precautions. It is recognized as being the mutual obligation of the Company and the Union to assist in the elimination and prevention of unhealthy and unsafe working conditions and practices and jointly to assist in the prevention of accidents.

Section 2. Health and Safety Committee — There shall be established a joint labor-management Health and Safety Committee, consisting of three Union Representatives and three Company Representatives who shall meet as often as necessary, but not less than once each month at a regularly scheduled time and place, for the purpose of jointly considering, inspecting, investigating and reviewing health and safety conditions and practices and investigating accidents, and for the purpose of jointly and effectively making constructive recommendations with respect thereto, including but not limited to the formulation of changes, elimination of and improvement in existing working conditions and practices . . .

If your contract allows that the Company provide reasonable health and safety precautions and has language whereby the Union can effectively make recommendations on health and safety, your Local probably has many similar rights to those established by Local 3-562. Contact your International Representative or the Health and Safety Office for advice and assistance.

- From Lifelines (OCAW)

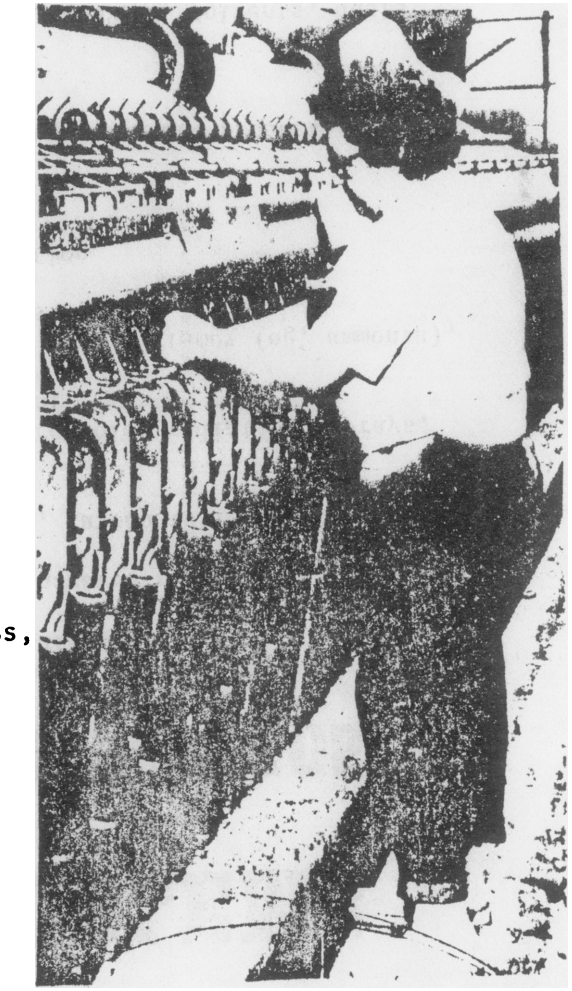
OCCUPATIONAL HEALTH PROBLEMS

area	symptoms	common causes
SKIN	redness, dryness, itching	solvents, plastics, epoxies, oil mist, fiberglass, caustic soda, metals (eg, nickel)
	redness, burns, blisters	ultraviolet and infrared radiation ,acids
	yellow color (jaundice)	liver disease (eg, carbon tetrachloride, vinyl chloride)
	skin cancer	mineral oils, ultraviolet radiation, x-rays, arsenic, pitch, tar
EYES	redness, irritation, watering	smoke, gases (eg, ozone), fumes (eg, ammonia), metal dusts, acids
	grainy feeling, "welder's flash"	ultraviolet radiation
EARS	ringing, temporary deafness, hearing loss	excessive noise
TEETH AND GUMS	corrosion of teeth	acid fumes, cellulose acetate production
	blue gums	lead poisoning
NOSE AND THROAT	sneezing, coughing, sore throat, runny nose	gases (eg, ozone), ammonia, solvents, dusts
	nasal cancer (bleeding, pain)	wood dusts
CHEST AND LUNGS	wheezing, congestion, dry cough	cotton dust, TDI, detergent enzymes, beryllium, solvents
	shortness of breath on mild exercise	long term exposure to mineral dust (eg, asbestos)
	flu-like symptoms (metal fume fever)	metal oxides from welding
HEAD	dizziness, headache	solvents, degreasers, ozone
	sleepiness	carbon monoxide, solvents
FINGERS	loss of circulation, whiteness, numbness, swelling	vibration (eg, using rivet guns, electric hammers), vinyl chloride (from cleaning reactor tanks)

BONES	arthritis	excessive vibration, constant crouching
MUSCLES AND BACK	soreness, strain	excessive or improper lifting, bending, etc.
NERVOUS SYSTEM	stress, nervousness, irritability	speed up, piece work rates, noise
	anxiety, sleepnessness, tremors, speech changes, blurred vision, mood changes	metal poisoning (lead, mercury)
REPRODUCTIVE SYSTEM	miscarriage	lead, pesticides, radiation
	irregularities in menstruation	polystyrene production
	damage to foetus or chromosomes	benzene, lead, radiation
	sterilization	radiation

health tests

TEST	WHAT IT'S LOOKING FOR	POSSIBLE SOURCE OF PROBLEM
BLOOD TESTS	industrial substances in body	lead, mercury, solvents
LIVER FUNCTION TESTS (BLOOD)	disease or damage in liver	vinyl chloride, carbon tetra-chloride, chloroform
SKIN PATCH TESTS	body reaction to industrial materials	solvents, oil mists, fiberglass, metal dust (ie, nickel)
CHEST X-RAY	damage to lung tissue	mineral dusts (coal, silica, asbestos, etc.), cotton dust
LUNG FUNCTION TEST	reduced breathing ability	dusts, TDI, solvent fumes, beryllium
AUDIOGRAM	hearing loss	excessive noise
URINE ANALYSIS	industrial substances in body	lead, mercury, solvents



- From Survival Kit, Urban Planning Aid

TOXIC SUBSTANCES AND THRESHOLD LIMITS

The Occupational Health and Safety Act of 1970 sets down the first federal standards on exposure to toxic substances, which have caused lung disease, dermatitis, dizziness and loss of faculties, systemic poisoning of kidneys, liver and other organs, and other problems resulting in well over 1 million cases of occupational diseases annually. These substances include chlorine, plastic compounds, teflon, phenolic and epoxide resins, solvents like naphtha MEK, trichloroethylene, benzene, toluene and xylene, used in spray coating dipping, pickling, degreasing and other processes.

THRESHOLD LIMIT VALUES

The Threshold Limit Values (TLV) under the act designed to protect workers from "adverse effects" of toxic substances, were originally "voluntary" guides for industry set by the American Conference of Governmental Industrial Hygienists (ACGIH), a private association dominated by state, health and safety department hygienists. Now these "voluntary" guides are law and violation is subject to fines and required control measures. While the ACGIH has added about 30 substances a year to its TLV's since 1965, there are many problems:

- -- out of over 6,000 commonly used industrial chemicals, only 412 have TLV's.
- -- most of the research studies are of animals, not people, or use laboratory subjects in ideal conditions, far from industrial settings where fatigue, heat, smoking, overweight and age add to the toxic effect of particular substances, making the TLV unrealistic.
- -- long-run effects, particularly cancer, lung damage, brain damage, are not adequately considered in the TLV's.
- -- dermatitis, irritation and other "minor" effects are not adequately considered in many cases in setting the TLV.
- -- TLV's are generally much higher than the EPA urban air pollution limits set by EPA for industrial pollutants, such as:

	TLV	Urban Air Pollution Limit
Carbon monoxide	50PPM	10PPM
Sulfur Dioxide	5ppm	.03ppm
Particulate	30mq/m^3	.75mq/m^3

PERFORMANCE vs DESIGN STANDARDS

TLV's are an example of "performance" standards, where you have to show that the TLV was exceeded to prove a violation. The other type of standard used is "design" requirements, where certain operations e.g., silica grinding, welding, etc., because of the likelihood of toxic concentrations, require control measures such as exchaust ventilation, without consideration of the level of toxicants. In "performance" standards, the burden is on the party trying to show violation, whereas with "design" standards, the burden is on the employer to show compliance with the "design" control measures.

Toxic Substances, cont'd.

In the OSHA standards, the TLV's in CFR 1910.93 constitute the basic air contaminant "performance" standard covering all operations, with requirements for "feasible engineering controls" and protective equipment, if necessary.

However, there are various "design" standards where ventilation (generally exhaust ventilation with varying capacity) is required, under all or certain conditions, such as:

--welding, cutting: CFR 1910.251
--spray finishing: 1910:107
--dip tanks: CFR 1910.108
--open surface tanks 1910.94
--grinding, buffing and polishing: 1910.94
--abrasive blasting: 1910.94

PROBLEMS IN USING THE TLV's

1. Average vs Ceiling

The TLVs in CFR 1910.93 are based on an 8-hour time weighted average, unless preceded by a C, which means "ceiling value" not to be exceeded, e.g.,

carbon monoxide 50 PPM (8-hour time weighted average)

C Diglycidyl ether (DGE) 0.5 PPM (ceiling limit)

For the few TLVs with ceiling limits, sampling could be restricted to a few observations at peak periods, but sampling for an 8-hour average concentration requires either continuous sampling with a monitaire pump or numerous spot samples with a Universal-tester displacement pump or similar device.

2. Excursion Factor:

Where there is an average limit there is still a maximum "excursion" factor for concentration above the TLV, based on relative toxicity of the substance; below are shown the OSHA excursion limits (OSHA compliance manual, p. xiii-13):

	PPM			
For substances with TLVs of:	0-1	1-10	10-100	100-1000
Excursion factor is limited to:	3	2	1.5	1.25

This "excursion factor" could only be allowed for 10-15 minutes and would have to be compensated by proportionate reduction below the TLV for the remaining time. Thus, carbon monoxide could be allowed to rise to a maximum of 100 ppm (twice the TLV) for a short time, but this would have to be balanced by levels below 50 ppm for other parts of the workday.

3. Two or More Substances:

Where several toxicants are present, their effects are assumed to be additive, and the concentrations are summed as follows:

Toxic Substances, cont'd.

5 ppm of carbon tetrochloride (TLV10), 20 ppm of ethylene dichloride (TLV50) and 10 ppm of ethylene dibromide (TLV25):

$$\frac{5}{10} + \frac{20}{50} + \frac{10}{25} = \frac{65}{50} = 1.3$$

TLV is exceeded

4. Synergism:

This occurs where two toxic substances interact together to have an effect greater than their "additive" effect, either by affecting the same "target organ" or because of the interaction between organs. Presently the TLVs don't take account of this.

SMELL AND IRRITATION AS SIGNALS

Sensory warnings of toxic substances are not reliable in many cases, since the odor or irritation threshold for some substances is above the TLV, and in some cases high concentrations of the substance numbs the senses. Hydrogen sulfide (sewer gas) is a good example, since it can be smelled at 10 PPM, but numbs the nose as it reaches the TLV of 20 PPM.

However, there are some guidelines helpful in "early warning" of toxic exposures:

1. If a substance is causing substantial skin disease (dermatitis) e.g., blistering, cracking, dry skin, it is probably exceeding the TLV.

2. In attached Table I are listed a number of common chemicals and odor and irritation thresholds which may help in identifying excessive exposure.

Bibliography

Some useful reference sources are:

Documentation of Threshold Limit Values, (ACGIH, Cincinnati, Ohio, 1971)
Handbook of Organic Industrial Solvents (American Mutual Insurance Alliance, 20 N. Wacker Drive, Chicago, Ill. 60606)
Irving Sax, Dangerous Properties of Industrial Materials (Reinhold Publishers, NY, 1968)
Scientists Committee for Occupational Health, Industrial Hazards (send $5.00 to 5C Barrett Drive, Kendall Park, N. J. 08824).

R. Ginnold
11/16/73

TOXIC SUBSTANCES AND THEIR SYMPTOMS

Toxic Substance	Symptoms
Acetone	Irritation of skin and mucous membranes of eyes and respiratory tract.
Acetylene	Headache, nausea, general malaise, feeling of suffocation, vertigo.
Acrolein	Excessive irritation of skin and mucous membranes of eyes and respiratory tract.
Aluminum	Not generally regarded as an industrial poison.
Ammonia	Irritation of respiratory passages, cough and dyspnea, pulmonary edema, bronchitis, severe irritation of eyes, conjunctivitis, caustic action on skin.
Benzine (Naptha gasoline)	Headache, vertigo, nausea, vomiting, cough, irregular respiration, weakness of heart, muscular twitching, drowsiness, "Naptha jag," dermatitis.
°C Benzol (Benzene)	Headache and vertigo, gastrointestinal disturbances, hemmorhages, purpura, injury to blood-forming organs with marked but varied changes in the blood picture.
Beryllium	Metal fume fever (see Zinc). Severe lung injury has been reported from the extraction of beryllium, but this is thought to be due to the fluorine compounds used in the process of extraction.
2, Butanone (methylethyl ketone)	Irritation of eyes and nose (Warning odor.)
Cadmium Fume (as Cd)	Loss of appetite, weakness, nausea, vomiting, rapid pulse, inflammation of lungs, cough, soreness of chest. Metal fume fever (chemical pneumonitis).
Carbon Dioxide	Large quantities cause sudden death by suffocation. Smaller quantities--vertigo, disturbances of respiration, ringing in ears, headache, dyspnea, drowsiness, muscular weakness.
Carbon Monoxide	Acute: Slow pulse, vertigo, headache, nausea, redness and suffusion of skin, dyspnea, fever, marked leukocytosis, coma and death. Chronic: Headache, nausea, vomiting, anemia, palpitation, insomnia, failure of memory.
Chlorinated Hydrocarbons	(See specific hydrocarbon such as carbon tetrachloride, etc.)

Toxic Substance	Symptoms
Chlorine	Acute:--Large quantities cause cardiac paralysis, smaller quantities cause burning and stinging of the skin with formation of blisters, papules; cough, dyspnea, bronchitis, spasm of the glottis; perspiration; feeble pulse. Chronic:--Gastritis, anemia, nasal and bronchial catarrh, furunculosis, decayed teeth.
Chromic Acid, and Chromates (as CrO^3)	Eczema, ulcers of the skin and mucous membranes, ulceration and perforation of the nasal septum.
Ethylene Dichloride	Irritation of eyes and nose, vertigo, static and motor ataxia, retching, unconsciousness -- death if exposure is prolonged.
Gasoline (Benzine)	(See Benzine)
Hydrochloric Acid	Violent coughing, dyspnea, bronchitis, destruction of teeth, contraction of throat, coma, caustic action on skin.
Iron Oxide Fume	Siderosis (lung disease; pigmentation of the lungs)
Lead	Weakness, pallor, metallic taste in the mouth and fetid breath, lack of appetite, deposit of lead line on gums and presence of lead in urine and blood.
Mercury	Chronic inflammation of the gums and mucous membrane of the mouth, loss of teeth, necrosis of the jaw, ulcers in the mouth and pharynx.
Methyl Alcohol (Methanol)	Irritation of eyes and respiratory passages, vomiting, vertigo, dyspnea, fatal paralysis of the heart, chills, thirst, dilated immobile pupils, optic neuritis, blindness, abdominal cramps, paralysis, delirium, coma.
Methylene Chloride (Dichloromethane)	Headache, giddiness, stupor-irritability, numbness and tingling in the limbs, labored breathing, rapid weak pulse.
Naptha	(See Benzine)
Nitric Acid & Nitrous Fumes	Irritation of air passages, spasmodic cough, bronchitis, feeling of suffocation, pain in chest, digestive disturbances, depression of the central nervous system, and severe burns on the skin. Continued exposure to diluted fumes is said to cause chronic inflammation of the respiratory tract.
Ozone (O^3)	Irritation of eyes and respiratory tract, headache, cough, pulmonary edema, depression and coma.

Toxic Substance	Symptoms
Sulphur Dioxide	Bronchitis, coughing, bluish discoloration of mucous membranes, spasmodic laryngitis, broncho-pneumonia, dyspnea.
Sulphuric Acid	Acute and chronic bronchitis, broncho-pneumonia, decay of teeth. On the skin local pain, redness, edema, ulceration.
Tetrachlorethylene (Perchlorethylene)	Irritation of eyes, tightness in frontal sinuses, increased perspiration of hands and increased secretion of mucous from nasal passages, nausea, elation, faintness, dizziness, dyspnea, retarded mental activity, headache and visual disturbances.
Toluol	(See Benzol).
Trichlorethylene	Symptom of acute poisoning include excitement, drunkenness, dullness, nausea, vomiting, unconsciousness, headache, vertigo.
Turpentine	Irritation of mucous membranes of eye, nose and upper air passages, bronchial inflammation, salivation, headache, vomiting, abdominal pain and vertigo, state of excitement resembling drunkenness, irritation of kidneys and bladder, strangury, odor of violets in urine, severe irritation of skin.
Xylol	(See Benzol).
Zinc Oxide Fume	Metal-fume fever characterized by: Irritation of respiratory tract, dryness of throat, dry cough, malaise, headache, nausea, severe chills with fever, pains in limbs, shaking in limbs, sweating leukocytosis.

R. Arndt
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Occupational Cancer

by

T. H. Patterson, M.D., M.P.H., D.I.H.*

Almost 200 years have passed since cancer was first identified and established as an occupational disease. Despite a tremendous amount of study and research, much about cancer is still a mystery. Unknown though the cause may remain, industrial physicians and industrial hygienists, through specialized research have shown beyond doubt that certain substances are cancer-producing; that is, they initiate cancer.

Cancer may be described as a condition which results when a normal cell becomes malignant and the transformed cell grows to a detectable tumour. Attempts have been made to explain how the cancer-producing substances (carcinogens) act upon the normal cells to produce cancer but the theories advanced have not been proved. Many cancer-producing agents are man made and are frequently associated with industrial processes in chemical and related industries or occupations.

HISTORY

The occupation first reported to claim cancer victims among its workers was that of chimney sweep. In 1775, an English surgeon, Sir Percival Pott, described and recorded his observations that a rare type of cancer (scrotal cancer) occurred *only* among young boys employed as chimney sweeps. Approximately a century passed following his original observations before another cause of occupational cancer was mentioned. In the late 1880s, paraffin and shale oil were described as a cause of scrotal cancer and skin cancer was attributed to tar. During these years, lung cancer was diagnosed as an occupational disease of miners in Scheenberg, Austria, but the exact cause was not appreciated. In this period, too, it was suggested that a precancerous condition of the skin among sailors resulted from their exposure to the ultraviolet rays of the sun. Shortly before the end of the century, 1895, bladder cancer was described in workers in the coal tar dye industry in Germany.

In the early 1900s, cancer of the skin was reported as resulting from exposure to x-rays, crude anthracene and saltpetre, and cancer of the lung among radium watch-dial painters. During the thirties, the occurrence of lung and sinus cancers was described among nickel workers and lung cancers among asbestos workers. Finally, in 1952, nasal sinus cancers were reported among workers in isopropyl alcohol manufacture.

EXPOSURE

As would be expected, exposure to chemical cancer-producing agents and to some types of ionizing radiation occurs most frequently in industry; but exposure to such agents is not limited to industry. As noted previously, ultraviolet rays from the sun are a potential source of occupational cancer for outdoor workers. Many occupational cancers occur in the skin and respiratory system since they are directly exposed to various carcinogens (oils, waxes, coal tar, pitch, soot and asphalt). The agents chiefly responsible for producing skin cancer are coal tar and shale oil. Coal products are considered to be the richest sources of cancer-producing agents yet discovered. Agents which may cause cancer of the respiratory tract are chromium dust, nickel dust and nickel carbonyl, coal tar fume, "isopropyl oil" vapors, and radioactive dusts and gases. In addition, inhalation and absorption of beta-naphthylamine or benzidine dust or vapours cause cancers of the urinary bladder

Generally, these and other occupational cancers

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occur in or on the body where the tissue is exposed to the greatest concentration of the cancer-producing agent for the longest period of time. It is not surprising, therefore, that of the four major sites of occupational cancer — the skin, respiratory tract, bladder, and blood-forming organs—the skin and respiratory systems are sites of primary contact by the cancer-producing agents.

Cancer does not appear at once upon exposure to a carcinogen, nor does it occur among all individuals exposed. It is believed that the more intense the exposure and the more potent the carcinogen, the sooner cancer will develop. Apparently, as noted previously, once sufficient exposure has been incurred in a susceptible individual, discontinuing the exposure does not prevent the development of cancer. Workers whose exposure to a carcinogen has numbered a few or many years and who changed jobs have been known to develop cancer many years later. In the intervening years, there were no signs or symptoms of cancer.

CLINICAL CHARACTERISTICS

Occupational cancers have several common characteristics:

(1) They usually appear only after a lengthy exposure in the related occupation.

(2) There is a long latent period, usually varying from 10 to 25 years.

(3) Tumours may develop many years after workmen have left their work if their exposure was sufficiently long.

(4) These cancers generally develop at an earlier age than non-occupational cancer and are dependent, among other things, upon the age at which exposure occurs and the latent period necessary for tumours to develop.

(5) Precancerous lesions characteristic for each particular occupation almost invariably precede the cancer.

(6) Localization of the tumour is remarkably constant in any one occupation.

(7) Occupational tumours are frequently multiple which is unlike ordinary forms of cancer.

OCCUPATIONAL CARCINOGENS

The main sites affected by some established occupational cancer-producing agents follow.

Site	*Agent*
Skin	Anthracene, crude
"	Asphalt
"	Creosote
"	Ionizing radiation (all types)
"	Mineral oil, crude
"	Paraffin crude
"	Pitch
"	Shale oil
"	Soot
"	Spindle oils, aromatic
"	Tar, coal
"	Ultraviolet rays
"	Wax, crude from coal
Respiratory System	Chromates
Respiratory Tract	Nickel and nickel carbonyl
Lungs	Ionizing radiation, all types
Bladder	4-Aminodiphenyl (xenylamine)
Bladder, ureter, kidney	Benzidine and derivatives
Bladder, ureter, kidney	beta-Naphthylamine

BLADDER CANCERS

Of the four sites where occupational cancers occur most frequently, the bladder has been selected for discussion because bladder cancers are difficult to detect, their incidence is increasing and, most important of all, they are preventable.

Though the incidence of bladder cancers is low, it has been increasing both for occupational and non-occupational cancers. Recently two men were reported to have sued a chemical industries firm and a rubber company because they contracted cancer of the bladder. Basis of their claim was exposure to a cancer-causing substance during their employment. Bladder cancers resulting from exposure to certain industrial chemicals have occurred for many years. Indeed, for more than a century it has been known that occupational exposure to certain industrial chemicals produces malignant tumours of the bladder and urinary tract. Unfortunately, some fifty years elapsed between the time the source of exposure was recognized and the adoption of measures to prevent or control exposure to these carcinogens.

BLADDER CARCINOGENS

The German surgeon Rehn (1895) first drew attention to the unusual frequency of bladder tumours among chemical workers in his practice. Since they all were engaged in the manufacture of fuchsin (a deep red dye), he concluded that the tumours were caused by the inhalation of aniline. Bladder cancers were therefore termed 'aniline cancer' but it was established many years ago that aniline itself does not produce cancer of the bladder, though a number of aromatic amines may be responsible. Interest in bladder cancers declined during the period between the two World Wars, possibly because the dyestuffs industry had been extensively re-organized. Interest in Great Britain was not renewed until a report (1947) drew attention to the high incidence of bladder tumours in two British chemical factories. Corroboration of this report's conclusion was, however, accumulating from many parts of the world. The conclusions reached in the 1947 report were substantiated by British scientists the following year. They studied the incidence of bladder tumours affecting

workers in the chemical industry and concluded in their published report that exposure to benzidine, alpha-naphthylamine and beta-naphthylamine was responsible for a substantial increase in bladder tumours appearing in those who had been exposed to these chemicals. Beta-naphthylamine was confirmed as the most powerful of the cancer-producing agents encountered.

Recently, scientists in the Federal Government's Department of National Health and Welfare, Occupational Health Division, identified 4,4' — dinitrobiphenyl and other biphenyl derivatives as carcinogens in the incidence of occupational bladder cancer. They have also developed a method to control exposure of industrial workers to these carcinogens.

EXPOSURE HAZARDS

Once the chemicals responsible for producing bladder cancer were identified, the extent and distribution of the hazard had to be determined. Further research revealed that the risk was not confined to the chemical industry. A similar industrial hazard was noted in the rubber industry where there had been extensive use of the carcinogenic materials introduced into rubber compounds as anti-oxidant. It is now known that these carcinogenic materials have been disseminated through a number of industries and therefore present a much greater industrial health problem than at first had been thought. Unfortunately, the exposure hazard is quite extensive and includes laboratory workers, employees in the textile and printing industries, and probably tar, pitch and soot workers.

CLINICAL CHARACTERISTICS

Following exposure there is a lengthy latent period which is characteristic of occupational bladder cancers. The interval may be from 4 to 48 years. During this time there may be no sign or symptom of the disease. In dye workers, the latent period is approximately 12 years. In 1954, research workers found the average latent period for bladder cancer to be 18 years. They suggested that the length of the latent period may be influenced by the nature of the cancer-producing agent. Of equal importance, may be the intensity and duration of exposure. In any case this latent interval offers the possibility of early diagnosis.

The site of bladder tumours renders diagnosis difficult because, unlike skin cancers, they are not readily apparent. Often bladder cancers occur at the openings of the ureter (tube which conveys urine from bladder to kidney). As noted earlier, localization of tumours is characteristic of occupational cancers generally.

Additional characteristics of these cancers are the more than usual tendency for them to be multiple and the age of the workman affected, which is earlier than that for ordinary cancers. It has been established that the earlier the age at which a man enters the industry, the earlier death occurs if a tumour develops.

SIGNS AND SYMPTOMS

Knowledge of the clinical features of occupational bladder cancers specific to that disease alerts the industrial physician to signs and symptoms also common to those of non-occupational origin. These may include:

—Presence of blood in the urine, usually sudden and painless.

—A warning period in which the patient suffers increased frequency of urination with strangury (slow and painful discharge of urine).

—Recurrences, usually fresh tumours at new sites —these are common and may recur at any time from months to years after the first incident.

—Metastases (spread to other organs) do occur, but they are less frequent than in other types of neoplasms (abnormal growths).

PREVENTIVE MEASURES

Often by the time symptoms of cancer become manifest, a prolonged series of treatments are required to arrest the cancer's growth and prevent metastasis. Since the salvage rate of any cancer patient is directly related to early diagnosis, there is special need for preventive measures to protect employees from bladder cancer, a difficult cancer to detect because of its location.

For those exposed to agents which may produce bladder cancers, the following preventive measures are recommended:

1) General cleanliness in the workroom.

2) Adequate exhaust for the removal of vapours.

3) Measures designed to diminish the emission of fume and dust.

4) Mechanical transport of chemical products in closed containers.

5) Improvements in the personal hygiene of the worker.

Despite the use of these measures in the dye industry in various parts of the world, bladder tumours still occur. Obviously, there is need for accurate methods to screen employees exposed to bladder carcinogens.

The need to develop a more accurate technique for the screening of a large industrial population led to the use of the Papanicolaou technique, that is, the examination of urine for the presence of abnormal cells. A report on the results of this test after a five-year period concluded that the test offers considerable advantages in the diagnosis of benign and ma-

lignant tumours and that this, coupled with the examination of urine for red blood cells, is the method of choice for screening an industrial population with a high risk of such tumours. One of the chief advantages of this test is its reliability. Of 40,000 consecutive urine tests carried out between 1955 and 1957 and the finding of 32 positive (men in whom a tumour was found) only one of these 32 positive tests was a false negative, that is, a man was reported as not having cancer when in fact he did.

SUMMARY

Exposure to cancer-producing chemicals occurs most frequently in industry. Following exposure to such chemicals, there is a long latent period in which there are no signs or symptoms of malignant tumours. The latent period from 10 to 25 years provides an opportunity for early diagnosis but in certain occupational cancers, particularly that of the bladder, the site of the tumours may delay early detection. There is need, therefore, not only for adequate measures to eliminate or control exposure to industrial carcinogens in the workplace, but for accurate screening tests which will reveal the presence of malignant tumours.

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A Fact Sheet on Chronic Bronchitis*

Since such a high percentage of workers in this study were diagnosed as having chronic bronchitis, special attention is given below to this disease.

Definition: Inflammation of the lining of the trachea (windpipe) and bronchial tree manifested by: chronic cough, sputum production and, in its more severe stages, obstruction of the airways, at which time heart disease also develops. About one-third of patients with chronic bronchitis will later develop emphysema.[4,5]

Morbidity and Mortality: According to a National Health Survey, there were 6 1/2 million cases of chronic bronchitis in 1970 and 5,450 deaths from the disease during 1971. Currently the third largest cause of total disability in the United States, it is also the fastest growing cause of permanent and total disability.[4]

Causes: Occupational Exposure, Environmental Exposure, and Smoking.[6,7]

Relationship of Chronic Bronchitis to Other Occupational Lung and Heart Diseases: The progression from chronic bronchitis to chronic obstructive lung disease and, ultimately to heart failure (if hazardous exposure continues) is pictorially represented in Figure 1 below. Whereas in the early stages morning cough and sputum production may be the only manifestations of disease (i.e., there may be no impairment of lung function), as obstructive lung disease evolves, the worker develops shortness of breath and progressive inability to do work he previously was able to do. Finally, when the lung disease becomes severe enough and especially if heart failure begins, total disability can result.

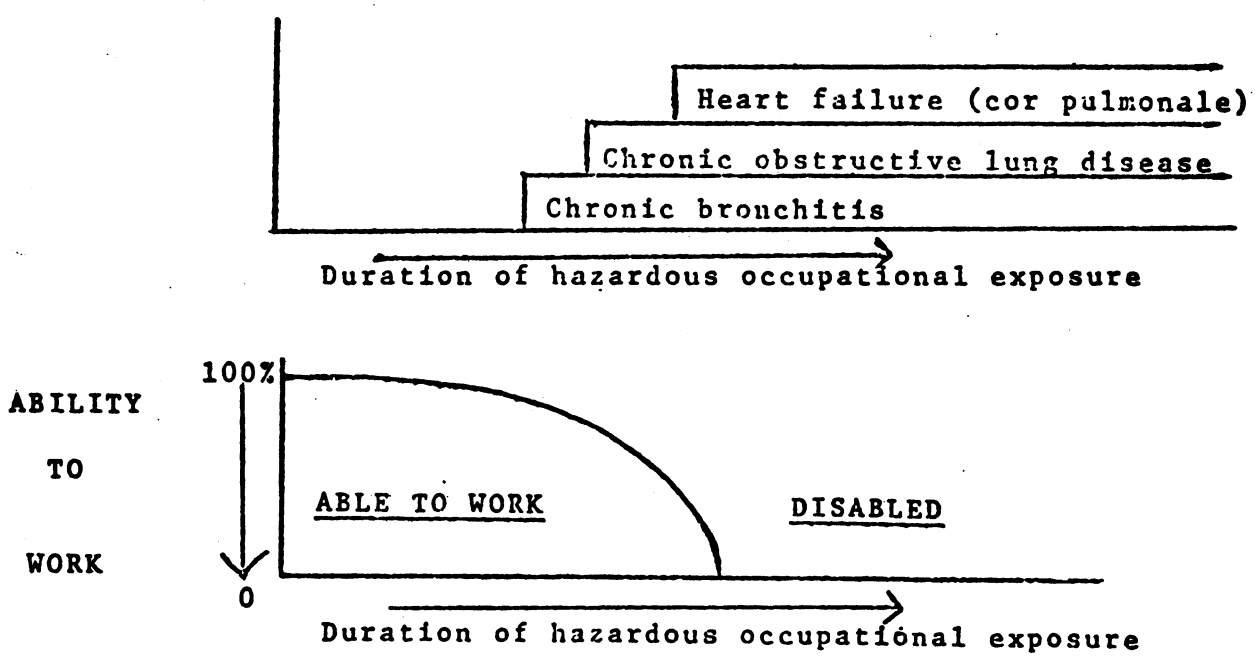

Figure 1: EVOLUTION OF OCCUPATIONAL LUNG AND HEART DISEASE

FIBERGLASS

Glass fiber is manufactured in two forms: textile fiber or yarn and wool.

The yarn is used for home furnishings and as a reinforcer for plastics, rubber, and paper. The wool is used mainly for acoustical insulation, thermal insulation, and filters.

HEALTH HAZARDS

The major hazards are dermatitis and irritations of the eyes and throat. The irritation can be caused in two ways:

1. The sharp glass fibers (slugs) scratch and chafe the skin,eyes, or throat.
2. Both glass fiber and glass wool are coated with resins containing phenol. Phenol is a major cause of dermatitis. Its fumes can also irritate the eyes and throat.

There are some simple ways to guard against irritation from fiberglass:

1. Wear clothes that are loose around the neck, cuffs, and waist. This will cut down on friction that rubs fiberglass into the skin.
2. Wear protective glasses.
3. Make sure that soap and water is easily available. Frequent washing keeps fiberglass from getting embedded in the skin. Barrier creams help a little, but shouldn't be relied on totally.
4. Work clothes should be changed every day and washed separately from other things. Better yet, the company should provide clean work clothes daily.

Doctors claim there is no evidence yet of lung disease from fiberglass. But it makes sense not to breathe in a lot of irritating material.

CONTROL MEASURES

1. Ventilation: a local exhaust will draw up fiberglass particles at the point where they're produced.
2. Wet method: spraying parts of the work area with water keeps the fiberglass from flying around.
3. Enclosure: it's effective to enclose the operation that gives off fiberglass dust.
4. Personal protection: as a last resort or temporary measure, protective clothing and respirator masks will help keep fiberglass away from the body.

FEDERAL EXPOSURE STANDARDS FOR FIBERGLASS

The Occupational Safety and Health Act includes fiberglass under the heading nuisance dust. There are two standards for exposure:

1. For tiny, nearly invisible particles (10 microns or less), that get into the lungs: no more than 15 million particles per cubic foot of air.
2. For larger, clearly visible particles (50 microns or more) that are unlikely to reach the lungs: no more than 50 million particles per cubic foot of air.

To measure the amount of fiberglass in the air, an industrial hygienist should be called in.

From Survival Kit, Urabn Planning Aid

DERMATITIS
(skin problems)

Many industrial materials and processes hurt the skin. They dry out the protective oils and water, causing redness, cracks, and infection. Or metal fragments in cutting fluids can cut the skin and let contaminents in.

Almost 60% of the cases coming before Workmen's Comp boards are skin problems. Nearly all of them could be prevented with better work practices.

CAUSES OF DERMATITIS

1. CHEMICALS

A. PRIMARY IRRITANTS (direct action on skin at site of contact)

Organic and inorganic acids	*Alkalis*
Corrosive salts & Reducing agents	*Petroleum oils*
Solvents	*Tar & pitch*

B. SENSITIZING AGENTS (delayed reaction, tendency to recur)

Dyes & dye intermediates	*Natural & synthetic resins*
Waxes	*Bichromates*
Rubber compounds & accelerators	*Photosensitizers*
Explosives & plasticizers	*Cosmetics*

2. PHYSICAL CAUSES

Heat & cold	*X-rays & radiation*
Sunlight	*Electricity*

3. MECHANICAL EFFECTS

Pressure & trauma	*Friction*

4. BIOLOGICAL AGENTS

Bacteria & fungus	*Animal parasites*
Woods and wood oils	*Plants*

Prolonged exposure to coal tar pitch, mineral oils, and nitrates has been linked to skin cancer.

PREVENTION

The only effective way to stop dermatitis is to make changes in the work process.

1. *Enclose operation giving off mist, fumes, dusts, or heat.*
2. *Ventilate the work area.*
3. *Place exhaust ventilation at the point where toxic material is given off.*
4. *Put up splash guards.*
5. *Replace cutting fluids often to prevent contamination.*
6. *Substitute mild materials for harsh ones.*
7. *Provide protective clothing if necessary (gloves,aprons,overalls).*
8. *Dry clean oily clothes---soap and water won't get oil out.*
9. *Provide good washing and showering facilities and mild cleansers.*
10. *Provide protective skin creams.*

A NOTE ON MEDICAL TREATMENT

Unlikely as it may seem, a big problem with dermatitis is overtreatment. Sometimes the ointments and creams prescribed to heal an infection can actually aggravate the situation. Also, patch tests used to figure out the cause of dermatitis can end up making the skin more sensitive.

So, the thing to do is LOOK AHEAD and put a stop to situations that can cause people to have dermatitis.

From Survival Kit, Urban Planning Aid

ASBESTOS FACT SHEET

BAY AREA COMMITTEE FOR OCCUPATIONAL SAFETY & HEALTH

B.A.C.O.S.H.

ASBESTOS AND YOUR HEALTH

Asbestos is among the most dangerous materials that you can work with. It is a killer. It works slowly and quietly; you are not likely to notice any ill effects from it until it has produced a serious or even fatal disease. Because it often takes years to act, you may feel safe when your life is in danger! Employers will rarely tell you the facts because it is cheaper for them not to protect you. This leaflet has important information about asbestos and what you and your fellow workers can do to protect yourselves from it.

GENERAL

Asbestos is a virtually indestructable fibrous mineral -- heatproof, fireproof, and resistant to most chemicals. It is used in more than 3,000 products, such as shingles for roofing and siding; sheets for exterior and interior walls; pipes to carry water, gas, and sewage; floor tiles; gas mask filters; processing of fruit juices, acids, beer, medicine; brake linings and clutch facings on automobiles and heavy equipment; papers and felts for roofing; acoustical ceilings; plasterboard; fireproof wall board; sheetrock taping compounds; reinforcement and filler in the plastics industry; fireproof insulation for spraying on structural steel; insulation for pipes and boilers; gaskets and seals; and welding rod. No factory or home is without asbestos. Almost no group of workers is without potential exposure. Asbestos is now regarded as one of the leading industrial causes of cancer.

HARMFUL EFFECTS

Asbestos is known to cause the following diseases:

1) Asbestosis - a severe scarring of the lungs caused by inhaling the fibers over a period of many years. It begins as a mere shortness of breath, but then develops into a near paralysis making breathing and body movements increasingly difficult. At the end, the victim's lungs function so marginally that if he does not suffer death from lung diseases like pneumonia, he will eventually suffocate.

2) Lung Cancer - linked to asbestos for many years. An asbestos worker who is a smoker has 92 times the chance of dying of lung cancer than a person who neither smokes nor works with asbestos. One in five asbestos workers dies of lung cancer.

3) Mesotheleoma - a cancer of the membrane lining the chest or abdomen. It is always fatal within a year after diagnosis, and is believed to occur only after exposure to asbestos. It can result from small doses of asbestos, well below the current maximum limit. There are reports of mesotheleoma after one

day's work in a shipyard, and in workers' wives who contacted it by washing their husband's clothes. Insulation workers can get it whether or not they smoke. One in ten asbestos insulation workers dies of mesotheleoma.

4) Gastrointestinal Cancer - effects asbestos workers three times as much as the general population. This cancer appears in the stomach, large intestine (colon), and the rectum.

You should also realize that other insulating materials, such as mineral wool, fiberglas, and other fibers, may well have similar effects as those associated with asbestos because of their physical properties, but at the present time there is no statistical information available. When your life is at stake, you should assume these substances are hazardous until proven otherwise.

MAXIMUM ALLOWABLE CONCENTRATION

There is no known safe level (other than zero) to prevent asbestos related diseases. The current federal standard of 5 fibers/cubic centimeter (cc) counting any fibers longer than 5 microns is aimed at eliminating asbestosis. However, evidence exists that insulation workers exposed to less than 5 fibers/cc have contracted asbestosis. The proposed 1976 reduction to 2 fibers/cc has been the standard in Great Britain for many years; but it is also known to be inadequate in protecting workers from asbestosis.

PROTECTIVE MEASURES

Work practices which are designed to release little or no dust to the air are possible. They must be used! The short fibers of asbestos dust, like water vapor, may stay airborne indefinitely. The following precautions are essential:

1) Any hazardous process should be isolated to limit exposure.

2) All areas should be kept dust-free by adequate ventilation and dust removal equipment.

3) Asbestos materials should be worked while damp wherever possible.

4) Housekeeping methods which keep the material confined to as small an area as possible and sealed disposal containers must be used.

5) The work clothing of exposed workers should be disposable. Restricted areas for cleaning up must be provided so that contaminated clothes will not come into contact with the street clothes of the workers.

6) The use of respirators is essential. However, this is hazardous to workers with cardiac or pulmonary problems as they add tc the strain on their heart and lungs. It must be remembered that a respirator is merely a filter and does not eliminate all fibers of respirable length. Workers should be given the choice of respirators as there is considerable difference in personal preference with regard to fit, comfort, ease of breathing, etc. Every effort to encourage the individual to wear the equipment is essential.

WELDING

FACT SHEET

BAY AREA COMMITTEE FOR OCCUPATIONAL SAFETY&HEALTH

If you are a welder, you're used to daily burns, headaches, nausea, eye damage, excessive heat, bad air, and other ill effects of your job. You may be less aware of such hazards as radiation which causes skin tumors, damaged lungs, and lung cancer. *None of these dangers should be taken for granted.* They can be sharply reduced if adequate safety standards are followed. Most employers drag their feet when it comes to enforcing existing safety standards. You and your fellow workers will have to demand that your employer follow standards that protect your life on the job. This fact sheet provides basic information about welding hazards, and what you can do to eliminate them.

HAZARDS OF WELDING PROCESSES

SHIELDED METAL ARC

(Low-alloy steel electrode) Produces nitrogen dioxide, a brownish red gas which irritates eyes, nose and throat. Many deaths have occurred from it and its effects show up in X-rays years after leaving the job.

(Low-hydrogen electrode) Produces flux fumes and acids including hydrogen fluoride and hydrofluoric acid that cause burning lungs, chills, painful breathing, burning skin, and weakening of teeth and bones.

(Low-alloy &stainless steel electrodes) Produces chromate fumes that cause skin ulcers, pink eye, bronchial asthma, and may cause lung cancer after many years' exposure.

SUBMERGED ARC

Causes vaporized fluorides like hydrofluoric acid mentioned above that affect the lungs, skin, and teeth.

GAS METAL ARC

Produces high ultraviolet and infrared radiation causing burns, headaches, eye damage, skin discoloration.

(Argon, helium shielding) Produces ozone, a sweet smelling gas that causes irritation and fluid in the lungs, hemmorrhaging and drowsiness. It also produces extremely poisonous phosgine gas when ultraviolet rays decompose degreasing chemicals. It has a bad odor affecting people 200 feet away.*Stop work immediately when it is smelled.*

(Carbon-dioxide shielding) Produces carbon monoxide in high concentrations which blocks oxygen from reaching body tissue.

(Nitrogen Shielding)Produces nitrogen dioxide and its effects mentioned above.

(Thorium tungsten electrodes) Produces highly radioactive thorium vapor.

GAS WELDING, CUTTING, BRAZING

The acetyline used is a narcotic and also cuts off oxygen causing varying degrees of suffocation. It is highly explosive and is contaminated with chemical impurities that are poisonous. Fluxes used produce fluoride fumes mentioned above. Brazing alloys are also dangerous. Silver brazing for example contains cadmium which can cause death after short exposures.

RESISTANCE

Produces metal fumes that cause fever symptoms mentioned above. Vomiting, sore muscles, the'chills' and headaches often are the result.

GENERAL HAZARDS

Welders frequently suffer cornea damage from arc flashes, gradual loss of vision, serious burns, explosions and fires from oxy-acetyline tanks, electric shocks and heat cataracts, and numerous other symptoms that you can add to the list.

PROTECTIVE MEASURES

CLOTHING

Leather coveralls, jackets, gloves, pants and heavy boots with leather or rubber soles in addition to regular work clothing should be mandatory apparrel. Welding caps to protect the scalp should also be worn.

SAFETY EQUIPMENT

Your employer should supply protective goggles for cutting and grinding; welders helmets with varied shades of dark glass depending on the technique and amperage used, should also be supplied. Breathing devices such as filtered masks or respirator units should be supplied when ventilation is inadequate. Fire fighting equipment should be within employees' reach.

SAFETY INSPECTION

A health and safety committee should be established to enforce and maintain standards and practices. Such a committee would do the following:

1) Inspect all equipment; test valves and hoses for leaks; check faulty pressure gauges and exposed cables, etc.
2) Insure that exposure to radiation and fumes is confined to specific areas.
3) Enforce federal guidelines for ventilation including adequate air turnover, ventilation hoods with air suction units, and respirators where needed.
4) Make gas exposure tests with air flow meters and remove all flammable materials from work site.
5) Label the chemical composition, toxicity or radioactivity of materials used.
6) Insure that monitoring equipment and inspection procedures are available to all welders and other affected personell in the shop.
7) Insure that Occupational Safety and Health standards are posted in the workplace relevant to the specific conditions of the job.
8) Conduct walk-around inspection of the plant or shop periodically to insure continual maintenance of the standards.

GENERAL STANDARDS

Most of the standards found in the Federal Register of the United States Occupational Safety and Health Administration (OSHA) provide adequate protection. The American Welding Society, Underwriters' Laboratories, and the Factory Mutual Engineering Corp. also publish useful standards. Most employers do not enforce them, or even post them! We must change this situation by using existing standards and other means to protect our lives and health. Even though enforcement of these standards takes hard work, our lives and health are worth the effort.

BACOSH *can provide you further information, and legal and technical assistance to help make your workplace safe. We also need your help. Any information you can provide about ways you or others you know have succeeded (or failed) in making a workplace safe and healthy is greatly needed so that it can be shared with other workers. We also need more people with work or technical experience to speak on occupational health and safety topics. Finally we need to know if we have left out anything in this leaflet. If you're interested, contact* BACOSH, 596 CHETWOOD, OAKLAND CALIF.

DEGREASERS FACT SHEET

BAY AREA COMMITTEE FOR OCCUPATIONAL SAFETY&HEALTH

Degreasers are dangerous substances which can cause serious liver and lung damage as well as a general loss of alertness. Trichloroethylene and tetrachloroethylene(also known as perchloroethylene) are narcotics,that is they depress the central nervous system. When exposed you may feel lightheaded,stoned,and nauseous,and as a result you are more likely to have an accident. Exposure to these degreasers can also cause dizziness,tremors, drowsiness,headache,nausea,and difficulty in sleeping.

LIVER DAMAGE

Degreasers attack the liver,and can reduce your tolerance to alchohol. If you are exposed to high concentrations(higher than the legal maximum exposure level) you may suffer severe liver damage. The early symptoms of liver damage are loss of appetite, headache,fatigue,and severe stomach pains. In later stages there is jaundice,very serious fatigue,and finally convulsions and possibly death.

LUNG DAMAGE FROM PHOSGENE PRODUCTION

If trichloroethylene is heated to high temperatures or exposed to radiant energy,as from nearby arc welding,phosgene is produced. Phosgene is a poison gas used in World War 1,which destroys the lungs. Operations which generate high temperatures or radiant energy should not be performed where trichloroethylene vapors are present.

REGULATIONS

The legal maximum level for exposure to these degreasers is 100 parts per million(i.e. .01% of the air). This limit should protect against liver damage,but some people exposed to 75 ppm for a workday experience fatigue,headache,disturbance of sleep, and have diminished performance on tests of memory,perception, and coordination. If you are exposed to this concentration the chemicals will stay in your blood,and the symptoms may persist when you are off work. Some researchers have recommended that the legal standard be lowered to 50 ppm,a recommendation which seems sensible in view of the above information.

You should also remember that the legal standard is an average for a workday,and exposure of up to 500 ppm for 5 minutes every two hours is permitted. The National Institute of Occupational Safety and Health recommended that the maximum exposure be reduced to 150 ppm,but this recommendation has been ignored by the enforcing agency,OSHA.

PREVENTIVE MEASURES

To prevent excess exposure,there should be good ventilating systems,and equipment should be kept in good repair to prevent leaks and spills.

NOISE

FACT SHEET

BAY AREA COMMITTEE FOR OCCUPATIONAL SAFETY & HEALTH

It is estimated that 17 million American workers suffer the effects of noise. As with many other diseases the workplace origin of noise related disease has been and continues to be ignored or covered-up. Federal regulation of workplace noise has progressed very slowly. Early laws covered very few workers and prohibited only "excessive noise" (the definition of which was so illusive that any enforcement was impossible). In 1970 the Occupational Health and Safety Administration (OSHA) gave the Secretary of HEW the responsibility for developing standards which were "safe yet feasible." These standards are now under final consideration. In 1972 the National Institute of Occupational Safety and Health (NIOSH) "reluctantly concurred with the generally acceptable standard of 90 dbA-slow exposure over an 8 hour day" although recognizing that an 85 db standard would save the hearing of 15% more workers and still subject millions to injury each year.

Noise is a pattern of waves in the air with the characteristics of: 1) pitch or frequency (measured in cycles per second, cps) and 2) loudness or intensity (measured in decibels, db). The decibels scale is logarithmic and therefore is deceptive because being logarithmic it is not additive. Rather, every time you add, say 10 decibels you really multiply the loudness by about 10. For every 2 to 3 decibel increase the loudness doubles.

The intensities of some common sounds are: barely audible 0-1 db, whisper 20db, conversation 60db, 1 ton truck 70db, 20 ton truck 92db, canning punch press 97db, can filling machine 100db, bulldozer 110db, level of pain 120db,(from the NIOSH Criteria Document).

Human speech utilizes sounds of frequencies between 500 and 4,000 cps. Current standards only cover hearing loss in this range and therefore only measure sounds on a scale which pretty much ignores sounds outside of this range. (This scale is called the "A scale" which explains why you usually see db written as dbA.) While the A scale does measure the noise most injurious to the human ear, it ignores much noise which may be equally or more damaging to other parts of our bodies.

Noise is of three major types: impact (rivetter, jack-hammer) impulse (jet or blast), and continuous (most occupational noise). Again current standards only deal with part of the problem and cover only the last type of noise (indicated by the notation dbA-"slow").

As we age we lose some of our ability to hear higher pitched sounds. But this kind of hearing loss is generally correctable and is insignificant compared to OCCUPATIONAL DEAFNESS. Occupational deafness is so much more serious because it is uncorrectable--resulting, as it does, from damage to the hairs and nerves of the inner ear. Deafness is measured as the change or shift, in db, in the softest sound you can hear. This is your threshold of hearing and the change is called "threshold shift". A temporary Threshold Shift (TTS) is experienced by anyone who is exposed to noise for a short time and then for a while after exposure has difficulty hear-

ing. (You get the feeling that you're in a very quiet place.) This TTS is temporary deafness. See if you can hear your wristwatch or a bird chirping immediately after an 8 hour work day. This TTS is about equal to what you will suffer permanently if you work in the same noise 8 hr/day, 5 days/week for 10 years! This is Permanent Threshold Shift (PTS) and is not correctable with a hearing aid or any other medical marvel. Those sounds will be lost forever. PTS due to aging (e.g. 30 years) alone is about 4-8db and is correctable with a hearing aid. But OCCUPATIONAL EXPOSURE to 90dbA-slow for the same thirty year period would result in a PTS of 24-48db or 100-10,000 times greater. Normal speech would sound like a soft whisper and whispers, intonations, and soft music would be inaudible. To conserve hearing, it is estimated that maximum noise levels should be in the range of 65dbA-slow and definately no higher than 80dbA-slow.

Deafness is not the most harmful effect of noise. Its effect on the rest of our bodies is less well understood but warrants no less concern. For it is through these effects on our vital organs, sometimes at levels as low as 70db, that noise potentially takes its toll of life.

In the shop, noise can decrease effeciency, alertness and reaction time, making accidents more common and more serious. And the effects of noise do not dissappear when one leaves the shop. Anxiety can be taken home or to the bar by a worker who has no clue as to its origin.

Recent research has shown a definite relationship between noisy working conditions and the incidence of serious personality problems. Other work has shown damage to brain cells of animals exposed to noise.

Noise also has a well documented effect on the heart and blood vessels. Noise can stimulate a stress reaction often called the fight or flight reaction. Such a reaction involves the pouring of hormones into the blood stream causing an increase in blood pressure and heart rate, the release of sugar and fats into the blood and the activation of blood clotting mechanisms. These results of the stress reaction strongly implicate noise as a cause or contributing factor in many cardiovascular diseases such as arteriosclerosis and hypertension. The stress reaction also causes bronchoconstriction, muscle tension and the diversion of blood away from the skin, intestines and kidneys--potentially leading to diseases in these organs.

Current standards are designed only to protect against hearing loss, and may be inappropriate to prevent these other hazards. Even ear protection is usually too haphazard. Ear muffs and ear plugs should be specifically designed to filter out the noise in your plant (selected pitches can be removed by specific devices). They must also be fitted to the individual worker.

NOISE AT WORK IS NOT JUST AN ANNOYANCE BUT A HAZARD. AND IT IS NOT UNAVOIDABLE.

BACOSH is a group of workers, scientists, health professionals and legal people who are pushing for a healthier workplace. We have offered general classes and specialized presentations on occupational health and safety. We would welcome your participation.

Please address comments and questions to: BACOSH, 596 A Chetwood St., Oakland, Calif. 94610.

CAL/ OSHA

OFFICES OF THE DIVISION OF INDUSTRIAL SAFETY

Main Offices

SAN FRANCISCO	455 Golden Gate Ave.	94102	415-557-1946
Los Angeles	3460 Wilshire Blvd.	90010	213-381-1332

Regional Offices

Fresno	2550 Mariposa St.	93721	209-488-5302
Los Angeles	3460 Wilshire Blvd.	90010	213-381-5695
Sacramento	714 P St.	95814	916-445-5818
San Diego	1350 Front St.	92101	714-236-7325
San Francisco	1540 Market St.	94102	415-557-1677

District Offices

Bakersfield	225 Chester Ave.	93301	805-324-6437
Chico	198 East 11th St.	95926	916-343-5182
Concord	1070 Concord Ave.	94520	415-676-5333
El Monte	3415 Fletcher Ave.	91731	213-572-6960
Long Beach	330 E. Fourth St.	90802	213-432-8443
Los Angeles	3460 Wilshire Blvd.	90010	213-381-3861
Modesto	1800 Coffee Rd.	95355	209-529-7751
Oakland	1111 Jackson St.	94607	415-464-0660
Panorama City	8155 Van Nuys Blvd.	91402	213-782-1800
Redding	1421 Court St.	96001	916-246-1621
Salinas	21 W. Laurel Dr.	93901	408-449-7235
San Bernardino	303 W. Third St.	92401	714-383-4321
San Jose	888 N. First St.	95112	408-277-1260
San Mateo	2555 Flores St.	94403	415-573-1718
Santa Ana	28 Civic Center Plaza	92701	714-558-4141
Santa Barbara	5276 Hollister Ave.	93111	805-964-3554
Santa Rosa	750 Mendocino Ave.	95401	707-542-8802
Stockton	31 E. Channel St.	95202	209-948-7762
Vernon	2833 Leonis Blvd.	90058	213-589-5848

Field Offices

Eureka	619 Second St.	95501	707-442-5748
Ukiah	264 E. Smith St.	95482	707-462-6850
Ventura	3418 Loma Vista Rd.	93003	805-642-1475

NOTE: The offices listed on this page will handle safety and health complaints.

DEPARTMENT OF HEALTH
Occupational Health Section

ADDRESS:	TELEPHONE:
Headquarters:	
714 P Street - Room 440 Sacramento, California, 95814 (Albert C. Starr, Chief)	**Public:** 916-322-2097 **ATSS:** 8-492-2097
Field Offices:	
Berkeley, California, 94704 2151 Berkeley Way	**Public:** 415-843-7900 extension 381 **ATSS:** 8-571-2381
Fresno, California, 93721 2550 Mariposa Street	**Public:** 209-488-5302 **ATSS:** 8-421-5302
Los Angeles, California, 90026 1449 Temple Street (P. O. Box 30327 Terminal Annex, 90030)	**Public:** 213-620-4290 **ATSS:** 8-640-4290
San Diego, California, 92101 1309 State Street, 2nd floor	**Public:** 714-236-7325 **ATSS:** 8-631-7218
San Francisco, California, 94102 455 Golden Gate Avenue - Room 7220 (P. O. Box 603, 94101)	**Public:** 415-557-3426 **ATSS:** 8-597-3426

Standards Development Unit

William Steffan, Supervising I.H. Engineer
455 Golden Gate Avenue, Room 7220
(P. O. Box 603, 94101)
San Francisco, California, 94102

Northern California Field Studies Unit and Northern California Pool

Jim Lim, Supervising I.H. Engineer
2151 Berkeley Way
Berkeley, California, 94704

Southern California Field Studies Unit, and Southern California Pool

Jim Heacock, Supervising I.H. Engineer
1449 Temple Street
Los Angeles, California, 90026
(P. O. Box 30327, Terminal Annex, 90030)

Medical Services Unit

Irma West, M. D., PHMO III
714 P Street
Sacramento, California, 95814

Planning, Training, Evluation Unit

R. McMillan, Supervising I.H. Engineer
714 P Street
Sacramento, California, 95814

OFFICES OF THE STATE LABOR COMMISSIONER

(Division of Labor Law Enforcement)

SAN FRANCISCO - Headquarters Office 455 Golden Gate Ave., P. O. Box 603 San Francisco, CA 94101	415-557-3827 415-557-3200

District Offices

Bakersfield - 225 Chester Avenue (93301)	805-327-4827
Burlingame - 100 El Camino (94010)	415-342-7235
El Centro - 588 Broadway (92243)	714-353-0585
Eureka - 619 Second Street (95501)	707-442-5748
Fresno - 2550 Mariposa Street, Room 4092 (93721)	209-488-5144
Inglewood - 520 N. La Brea Avenue (90302)	213-674-6522
Long Beach - 230 E. Fourth Street, Room 2007 (90812)	213-432-8978
Los Angeles - 107 S. Broadway, Room 5015 (90012)	213-620-2486 213-620-2100
Oakland - 1111 Jackson Street, Room 3062 (94607)	415-464-1353
Pomona - 436 West Fourth Street (91766)	714-623-4306
Redding - 2115 Akard Avenue (96001)	916-246-0430
Sacramento - 714 P Street, Room 1376 (95814)	916-445-8478
Salinas - 21 W. Laurel Drive, Suite 1 (93901)	408-449-5467
San Bernardino - 303 West Third Street (92401)	714-383-4339 714-383-4333
San Diego - 1350 Front Street, Room 3064 (92101)	714-236-7334
San Jose - 888 North First Street (95112)	408-277-1265
Santa Ana - 1624 West 19th Street (92706)	714-547-3055
Santa Barbara - 411 East Canon Perdido Street (93101)	805-963-1438
Stockton - 31 East Channel Street (95202)	209-948-7770
Vallejo - 856 Tuolumme Street (94594)	707-644-7755
Van Nuys - 6931 Van Nuys Boulevard (91405)	213-782-3733

NOTE: The offices listed on this page will handle cases of employer retaliation against employees who make safety or health complaints.

R. Wilkins, Chief
Division of Industrial Safety

August 26, 1974

Permanent Advisory
Committee to Review
Comparison of the Division's
Safety Standards with OSHA

C. W. Farmer
DIS, SF

The following is an up-to-date list of the Permanent Advisory Committee.

Symbol	
M	Four representatives from management organizations
L	Four representatives from labor organizations
PU	One representative from public utilities
P	One representative from public
B	Two representatives from standards setting boards
BO	One representative from California building officials

Total - 13 representatives

Symbol	Organization	Address
M	American Institute of Architects California Council (John Fisher, AIA Code Committee Chairman)	1736 Stockton San Francisco 94133
M	Associated General Contractors (Paul Henson, Safety Director)	301 Capitol Mall Sacramento, 95814
B	Building Standards Commission (William Vick)	1500 - 5th Street Sacramento, 95814
M	California Farm Bureau (Tom Richardson, Farm Advisory)	2855 Telegraph Ave. Berkeley 94705
L	California Labor Federation, AFL-CIO (Albin J. Gruhn, President)	995 Market St., Suite 310 San Francisco 94103
M	California Manufacturers Assn. (Del Dimmitt, Member)	General Dynamics Convair Aerospace Div. P. O. Box 80877 San Diego, 92138

Symbol	Organization	Address
P	Gilbert L. Rhodes Consultant - Safety	1322 Webster Ave. Oakland 94612
L	International Brotherhood of Teamsters (Chuck Mack, Secretary Treasurer)	70 Hegenberger Road Oakland 94621
L	Operating Engineers, Local 3 (Jerry Martin, Safety Director)	474 Valencia St. San Francisco 94103
PU	Pacific Gas & Electric Co. (Raymond W. White)	245 Market St. San Francisco 94106
L	State Building & Construction Trades Council of California (Floyd C. Elliott)	1107 - 9th Street Sacramento 95814
B	Occupational Safety & Health Standards Bd. (John L. Bobis, Sr. Safety Engineer)	1006 Fourth Street Sacramento 95814
B	California Building Officials (Victor L. Taugher, Alameda Co.)	399 Elmhurst Hayward 94544

C. W. Farmer
Principal Safety Engineer
Construction/Industrial Unit

/mm
cc R. J. Rodriguez
R. W. Jensen

Health Standards Advisory Committee

OCCUPATIONAL HEALTH STANDARDS CONSULTANTS

Steve Davis
State Comp. Insurance Fund
525 Golden Gate Avenue
San Francisco, CA 94102

Stan Dryden
Standard Oil of California
225 Bush Street
San Francisco, CA 94104

Peter S. Ellis
Republic Indemnity of America
1220 No. Highland Avenue
Los Angeles, CA 90038

Theodore Felton
General Electric Company
Nuclear Energy Division
175 Curtner Avenue
San Jose, CA 95114

Louis S. Hauger
Vernon Health Department
4305 Santa Fe Avenue
Vernon, CA 90058

Charles Hine, M.D.
University of California
School of Medicine
P. O. Box 7604 Rincon Annex
San Francisco, CA 94120

Douglas Johnson
Federal Office Building
50 Fulton Street
San Francisco, CA 94102

Jerry Martin
Operating Engineers, Local 3
474 Valencia Street
San Francisco, CA 94103

Dwight Culver, M.D.
University of California-Irvine
School of Medicine
Dept. of Community & Environmental Medicine
Irvine, CA 92664

Cline Vanneman, Ph.D. (Staff)
Standards Development Unit
Occupational Health Section
714 P Street, Room 440
Sacramento, CA 95814

Ron Ott
Department of Labor/OSHA
450 Golden Gate Avenue
Box 36017
San Francisco, CA 94102

Alice Ottoboni, Ph.D.
Department of Health
Food and Drug
2151 Berkeley Way
Berkeley, CA 94704

Howard Spielman
Health Science Associates
10710 Felson Circle
Cerritos, CA 90701

Irma West, M.D. (Staff)
Department of Health
Occupational Health Section - OB8
714 P Street, Room 440
Sacramento, CA 95814

Al Klascius
Jet Propulsion Lab
4800 Oak Grove Drive
Pasadena, CA 91103

William W. Steffan (Staff)
Standards Development Unit - Room 7220
Occupational Health Section
455 Golden Gate Avenue
San Francisco, CA 94102

Richard Dechant (Staff)
Standards Development Unit - Room 7220
Occupational Health Section
455 Golden Gate Avenue
San Francisco, CA 94102

LIST OF APPOINTEES to OSHA STANDARDS BOARD

Albert W. Turner - Chairman of Board Supervisor of employee relations for Southern Cal Gas Co.	730 Cavanagh Road Glendale, CA 91207
Gerald P. O'Hara Asst. Director of Calif. Teamsters Legislative Council in Sacto.	801 Vallanova Drive Davis, California 95616
Leo R. Westwater Vice President & Secretary of Granite Construction Co. in Watsonville	149 Martinelli Watsonville, California 95076
Patrick J. Clancy, M.D. Political Independent and specializes in occupational medicine	3812 Dell Road Carmichael, California 95608
Dr. Harold V. Brown Environmental health & Safety ofcr with Center for Health Sciences at UC in Los Angeles	6008 Chariton Avenue Los Angeles, California 90056
J. Earl Coke Former Secretary of Agriculture & Services Agcy., & former member of Gov.'s cabinet	850 Powell Street, Apt. 605 San Francisco, California 94108
William K. Stuckey Secretary-Treasurer & Business mgr. of Iron Workers of San Diego, Local 229	3840 Alta Loma Drive Bonita, California 92002

LIST OF APPOINTEES TO OSHA APPEALS BOARD

Ford B. Ford Chairman of Board He has been with Resources Agency	7416 Westgate Drive Citrus Heights, California 95610
Gerald A. Shearin Retired as Secretary-Treasurer of Teamsters Local 137	3719 Arboga Road Marysville, California 95901
Herbert Monroe Browne Retired Businessman	6509 Yosemite Place Bakersfield, Calif. 93309

CALIFORNIA SAFETY ORDERS

PRICE LIST

		With Sales Tax
Aerial Passenger Tramway Safety Orders	$ 0.75	$ 0.79
Boiler and Fired Pressure Vessel Safety Orders . .	.75	.79
California Shaft Bell Signals (on oil cloth) . . .	1.50	1.58
Compressed Air Safety Orders	.75	.79
Construction Safety Orders	2.00	2.10
Electrical Regulations (See Title 24, Part 3, below)		
Elevator Safety Orders	2.00	2.10
General Industry Safety Orders	2.00	2.10
Logging and Sawmill Safety Orders	2.00	2.10
Mine Safety Orders	1.00	1.05
Petroleum Safety Orders, Drilling and Production .	1.50	1.58
Petroleum Safety Orders, Refining, Transportation and Handling	1.50	1.58
Ship and Boat Building Safety Orders	.75	.79
Title 24, Part 3 (Basic Electrical Regulations) .	7.00	7.35
Tunnel Safety Orders	1.00	1.05
Unfired Pressure Vessel Safety Orders	1.25	1.31
Window Cleaning Safety Orders	1.00	1.05

The safety orders listed above may be ordered from the State Office of Procurement, Document Section, P. O. Box 20191, Sacramento, CA 95820. Make checks payable to STATE OF CALIFORNIA.

CONFIDENTIAL

COMPLAINT

STATE OF CALIFORNIA
DEPARTMENT OF INDUSTRIAL RELATIONS
DIVISION OF INDUSTRIAL SAFETY

Complainant's Name _____ (Type or Print)

Position _____

Address _____ (Street)

_____ (City) _____ (Zip Code)

Telephone Area ( ) _____ (Home) Area ( ) _____ (Office)

For Office Use Only

A. Region ____ Rec'd By _____ Date _____

Telephone [ ] Written [ ] Oral-In Person [ ]

B. District ____ Rec'd/Reg: Date _____ Time _____

C. District ____ Rec'd By _____ Date _____

Telephone [ ] Written [ ] Oral-In Person [ ]

D. Complaint Log No. _____

Complaint *(Check one)*

[ ] Employee

[ ] Representative of employees
If you are a representative of employees, state the name of your organization:

[ ] Other *(specify)* _____

believes that a violation at the following place of employment of an occupational safety or health order exists which is a job safety or health hazard.

Does this hazard(s) immediately threaten death or serious physical harm? [ ] Yes [ ] No

Employer's Name _____

Address _____ (Street) Telephone ( ) _____ (Area)

_____ (City) _____ (Zip code)

1. Kind of business _____

2. Specify the particular building or worksite where the alleged violation is located, including address. _____

3. Specify the name and phone number of employer's agent(s) in charge. _____

4. Describe briefly the hazard which exists there including the approximate number of employees exposed to or threatened by such hazard.

(Continued on reverse side)

5. List by number and/or name the particular order(s) or code(s) which you claim has been violated, if known.

6. (a) To your knowledge has this violation been considered previously by any Government agency? _____

(b) If so, please state the name of the agency _____

(c) and, the approximate date it was so considered. _____

7. (a) Is this complaint, or a complaint alleging a similar violation, being filed with any other Government agency?

(b) If so, give the name and address of each. _____

8. (a) To your knowledge, has this violation been the subject of any union/management grievance or have you (*or anyone you know*) otherwise called it to the attention of, or discussed it with, the employer or any representative thereof? _____

(b) If so, please give the results thereof, including any efforts by management to correct the violation. _____

9. Please indicate your desire:

☐ I do not want my name revealed to the employer.

☐ My name may be revealed to the employer.

Continue Item 4 here, if additional space is needed.

_____ _____

(Date) (Signature of Complainant)

Complaint handled by: _____ **Date** _____

Engineer Signature

EXAMPLE - LETTER OF COMPLAINT

Chief
California Division of Industrial Safety
455 Golden Gate Avenue
San Francisco, CA 94102

Dear Sir or Madam:

This letter is a formal request for an inspection with regard to safety and health hazards at the Blank City Municipal Shops located at 000 Industrial Drive, Blank City, CA.

Problems are as follows:

1. Unguarded belts on machinery.
2. Frayed electrical wiring on portable tools.
3. Poor housekeeping - fire hazard.
4. High noise levels on woodworking machinery.
5. Paint spray mist in paint shop.
6. What is the hazard from the solvent used to strip paint off of old desks? Men also use this to wash their hands.
7. Air is full of dust in the sandblasting department.
8. People who work in the auto body shop seem to have lots of skin rashes on their hands and legs.
9. Food from the vending machine in the locker room is often spoiled.
10. There are no drinking fountains.
11. Chemical odors from the duplicating machines worry the operators as to possible effects on their health.

Additional problems will be brought to the attention of your field representative during the walk-around inspection. The following are employee representatives who will be available to participate in the walk-around inspection:

Day shift - name, location, phone number
Afternoon shift - name, location, phone number
Night shift - name, location, phone number
(Include the above list of names if appropriate)

In accordance with CAL/OSHA, I wish to receive copies of any notices, citations or findings resulting from the inspection and to be kept fully informed of your progress.

I do not want my name revealed to the employer. (This last sentence may be left out if you are not concerned about the employer learning your identity or if you are employee representative.)

Sincerely,

Sign your name here
Insert mailing address here

NOTE: Keep a carbon copy for your files.

COMPLAINT ABOUT STATE 18(B) PROGRAM ADMINISTRATION

1. This form is provided to assist you in the filing of your complaint about the administration of the State's Occupational Safety and Health Program. Your complaint, however, must be based on facts directly related to the following:

   1. Action(s) which took place at a specific time and place.
   2. Action(s) which you believe indicate inadequate administration of the State's Occupational Safety and Health Program.

2. Date of Incident	3. State	4. County	5. City

6. Street Address Where Incident Occurred

7. Name of Employer or Name of Place Where Incident Occurred, If Applicable

8. Name(s) and Occupation(s) of Persons Involved in Incident, If Applicable

9. Describe the Incident which caused your complaint.

10. Name(s) of Person(s) Submitting Complaint (will be withheld upon request)

11. Telephone where you can be reached for information Area Code: No. Ext.	12. Date This Form Completed

13. Address No., Street, City and State, Zip Code

14. [ ] Do not Reveal My Name [ ] You May Reveal My Name During Investigation

15. The State Agency [ ] Has [ ] Has not been Furnished this Data

16. Signature of Person Filing Report

For complaints against the states of Arizona, California, Nevada, Hawaii, Guam Somoa, or Trust Territories mail this form to: 450 Golden Gate Avenue, U.S. Department of Labor, OSHA, Box 30617, San Francisco, California 94102.

Sample of Cal/OSHA Citation to Employer

STATE OF CALIFORNIA – AGRICULTURE AND SERVICES AGENCY

DEPARTMENT OF INDUSTRIAL RELATIONS

DIVISION OF INDUSTRIAL SAFETY

1. Office: District Office
750 Mendocino Ave., Rm. 3
Santa Rosa, Calif. 95401

CITATION

2. TO: Uniform Lumber, Inc.
128 Market Avenue
Eureka, CA 94762

3. Page 1 of 1

4. Type of alleged violation(s): Nonserious

5. Citation Number 1

6. An inspection or investigation of a place of employment located at 128 Market Ave., Eureka was conducted by Joe Safety on 9/5 19 74 This citation is being issued in accordance with California Labor Code Section 6317 for alleged violations as shown below that were found during that inspection. (LC refers to California Labor Code, CAC refers to California Administrative Code.)

7. Item No.	8. Standard, order, regulation or code allegedly violated	9. Description of alleged violation	10. Date by which alleged violation must be corrected
1	8 CAC 3213(c)	Alleged Facts: The mezzanine at the south end of the glue shop is used by employees and has no railing or other protection along the exposed edge which is six feet above the area to which a person might fall; a violation to wit: Failure to provide a guardrail, 42" to 45" high with horizontal midrail and toeboard at exposed edge of mezzanine.	9-19-74

11. Signature _____ Safety Engineer

12. Signature _____
Name Jack Superior District Manager Sept. 7, 1974 Date of Issuance

Citation(s) or a copy thereof must be prominently posted upon receipt by the employer at or near the location of each alleged violation until the unsafe condition is corrected or for three working days, whichever is longer.

Violations of the provisions of the California Labor Code or of safety and health standards, orders or regulations promulgated under the Labor Code may result in a civil penalty imposed on the employer and may result in some instances in a prosecution for a misdemeanor. If a monetary penalty is assessed, the employer will be notified promptly. The employer has fifteen working days after receipt of the above citation within which to notify in writing the California Occupational Safety and Health Appeals Board, 1006 – 4th Street, Sacramento, CA 95814, of his intention to contest any alleged violation or abatement period. The above citation will become a final order of the Appeals Board not subject to review or appeal unless contested by the employer, an employee or employee's representative. Failure to abate the unsafe condition within the time specified may result in an additional proposed penalty of up to $1,000 being assessed for each day beyond the abatement period the unsafe condition is not abated.

An employee or his representative may contest in writing to the California Occupational Safety and Health Appeals Board the reasonableness of the abatement period within fifteen working days from the date of issuance of the citation.

13. Region 1 District 1 Ident. No. S8932 CAL/OSHA 1 Rep. No. 35

CAL/OSHA 2-A
October 1973

STATE OF CALIFORNIA
DEPARTMENT OF INDUSTRIAL RELATIONS
DIVISION OF INDUSTRIAL SAFETY
455 GOLDEN GATE AVENUE
SAN FRANCISCO

ADDRESS REPLY TO:

CITATION
COMPLIANCE REPORT

FIRM_____

STREET ADDRESS_____

CITY_____

This report form accompanies a citation which lists Safety Order violations observed during an inspection of your operations at the site indicated. The law requires that these violations be corrected within the time limit specified. Please notify the Division as soon as these conditions have been corrected by returning this completed form. Your response by signing and mailing this form to the Division on or before the compliance date may avoid the inconvenience of a Follow-up Survey of your facilities.

PLEASE COMPLETE AND RETURN BY_____, 19___.

This certifies that all the unsafe conditions listed in the Division's Citation dated_____, 19___have now been corrected.

SIGNED
NAME
TITLE

NOTE: This form does not serve as a request for a time extension. If there are serious problems beyond your control that prevent meeting of the specified abatement date contact the Division early, well within the 15 day limit allowed for appeal.

I.S. 160 - 5/3/74

SAFETY PUBLICATIONS

The next four pages of material available from:
California Division of Industrial Safety
455 Golden Gate Ave., San Francisco 94102
or 3460 Wilshire Blvd., Los Angeles 90010

BULLETINS	GENERAL	CONSTRUCTION	INDUSTRIAL	FARMING	ELECTRICAL	CAL/OSHA
S-103 SAFE HANDLING OF LP GAS - give the use and characteristics of LP Gas and rules for safe handling.			X		X	
S-108 TAMING THE CIRCULAR SAW- deals with a useful but dangerous tool.			X	X		
S-109 SAFETY FILMS AVAILABLE - list industrial safety films in the Division's free-loan film library	X		X	X	X	
S-111 FARM SAFETY CHECK LIST - is a safety guide for every worker on a farm.					X	
S 117 STOP GRINDING OUT INJURIES - describes precautions to take with abrasive wheels.			X	X		
S-120 SAFETY RULES FOR PAINTERS - shows how to prevent injuries to painters.			X			
S-123 THREE STEPS FOR THE SAFE USE OF PORTABLE LADDERS - explains how to avoid ladder accidents.			X	X	X	
S-124 SAFETY RULES FOR ROOFERS - analyzes roofer injuries and tells how to prevent them.			X			
S-128 IF YOU WORK IN A QUARRY - covers quarry and open-pit mine workers.		Quarry and mine work				
S-137 SKIN TROUBLE IS PLENTY TROUBLE - deals with the most common disease you can get at work.	X		X	X	X	
S-140 KEEP AWAY FROM POWER LINES! - is about the hazards of overhead electric power lines.			X		X	X
S-141 POWER HAND SAW SAFETY - gives causes of power hand saw injuries.			X	X	X	
S-144 THE KNOW-HOW OF WIRE ROPE SAFETY - gives valuable pointers.			X			
S-145 SAFETY PUBLICATIONS AVAILABLE - list bulletins, placards and stickers which are free for the asking.	X		X	X	X	X
S-146 SAFETY IN PIPELINE CONSTRUCTION - tells how to plan and organize safe pipeline jobs.			X			

(more)

SAFETY PUBLICATIONS

	General	Construction	Industrial	Farming	Electrical	Cal/OSHA	
S-147 THE SAFE USE OF ANHYDROUS AMMONIA IN AGRICULTURE - discusses the three most important factors in its safe use.					X		
S-148 THE SAFE USE OF AQUA AMMONIA IN AGRICULTURE - this describes precautions to take for safely using aqua ammonia.					X		
S-149 SAFETY PROGRAM FOR THE CONSTRUCTION CONTRACTOR - lists essential points to include in a sound program, as required by law.			X				
S-153 ELECTRICAL SAFETY ON THE FARM - tells how to guard against electrical hazards.					X	X	
S-154 TAILGATE SAFETY MEETING - offers pointers on this effective way to promote on-the-job safety.			X	X	X		
S-156 GUARD STANDARDS No. 1 - MATERIALS & CONSTRUCTION - offers valuable advice on constructing guards and selecting right material for them.				X			
S-157 GUARD STANDARDS No. 2 - STAIRWAYS & RAILINGS - gives requirements for stairways, railings, entrances to stairways, floor openings and wall openings.			X				
S-158 PROTECTION OF WORKMEN IN TRENCHES - describes the measures required by law to reduce trench cave-ins.			X				
S-160 CONFINED SPACE CAN BE A DEATH TRAP! - warns of danger of deadly gases that can form in silos, tank cars, sewers, etc. and/or oxygen deficiency in shafts, unused barges, vats, etc. and equipment to use and procedures to protect life.			X	X	X		
S-161 SAFETY PROGRAM FOR SMALL INDUSTRY - gives pointers on what program should include and hot to set one up.			X	X	X		
S-657 ACCIDENT PREVENTION PROGRAM FOR THE CONSTRUCTION INDUSTRY - contains requirements construction employers must observe.			X				
S-802 LOCK OUT - BLOCK OUT - good pointers on avoiding the hazard of machinery moving when it was believed inactivated; flow of electric current, chemicals, oil, water, etc. that was to have been turned off.			X	X	X	X	
S-804 MATERIAL HANDLING - SAFETY & COMMON SENSE IN FORK LIFT TRUCK OPERATION - has valuable pointers on proper way to operate fork lifts and avoid hazards.			X	X	X		
S-806 MATERIAL HANDLING - SAFETY AND COMMON SENSE IN HAND LIFTING - gives 7 pointers to avoid back strain and tells how weightlifters do heavy lifting.	X		X	X	X		

(more)

SAFETY PUBLICATIONS

	GENERAL	CONSTRUCTION	INDUSTRIAL	FARMING	ELECTRICAL	CAL/OSHA
S-811 FIVE STEPS TO AVOID SLIPS AND FALLS - They're not so amusing when they happen to <u>you</u>, so read these pointers.	X	X	X			
S-813 HAND TOOLS AND SHOP SAFETY - gives proper use & care of many kinds of tools and reminds about proper grounding.		X	X	X	X	
S-815 - THE CALIFORNIA OCCUPATIONAL SAFETY AND HEALTH ACT OF 1973 - a digest of the enabling legislation of this Act.						X
S-816 - ASSESSMENT OF CIVIL PENALTIES - explains how they are assessed for serious, nonserious and regulatory violations under provisions of the California Occupational Safety and Health Act of 1973.						X
<u>PLACARDS</u> $8\frac{1}{2}$" x 11"						
S-101 SAFE HANDLING OF LP-GAS - gives proper procedures for handling and installing LP-Gas units. $5\frac{1}{2}$x$8\frac{1}{2}$			X	X	X	
S-612 NOTICE...FUSE USED HERE BURNS... - a good warning.	Mining					
S-615 STOP MACHINERY BEFOREOILING, CLEANING, REPAIRING			X	X	X	X
S-617 WEAR GOGGLES. YOU CAN GET USED TO GOGGLES - BUT NEVER TO A GLASS EYE - for posting where eye protection is needed.			X	X		
S-800 HAND SIGNALS FOR BOOM EQUIPMENT OPERATION			X			
S-801 THE ABC'S OF SAFETY - an alphabetical reminder with cartoons and tart quips to work thoughtfully.			X	X		
S-807 EMERGENCY NUMBERS FOR THIS PROJECT - Space to put phone for Ambulance, Fire, Police, Hospital.			X	X		
S-809 SAFE PRACTICE FOR MOUNTING & INFLATING TIRES with SPLIT RIM and/or RETAINER RINGS			X	X	X	
S-810 SAFE PRACTICE FOR MOUNTING AND INFLATING PASSENGER CAR and other DROP CENTER WHEEL TIRES				X		
S-812 OPERATING RULES FOR INDUSTRIAL TRUCKS, INDUSTRIAL TOW TRACTORS, FORK LIFT TRUCKS			X	X	X	

(more)

SAFETY PUBLICATIONS

	GENERAL	CONSTRUCTION	INDUSTRIAL	FARMING	ELECTRICAL	CAL/OSHA
STICKERS 3"x5¼"						
S-616 WARNING - This machine is automatically controlled and may start at any time.			X		X	
S-658 REMEMBER!- This guard is here for your protection! Don't remove it! Don't try to beat it! If the guard is removed, don't use the machine! See your boss!			X		X	
S-808 BLASTING SIGNALS - Warning, blasting and all-clear signals are given.		X				
SPANISH LANGUAGE						
Bulletins						
S-123-S TRES PASOS PARA EL USO SEGURO DE ESCALERAS PORTATILES Same as S-123		X	X	X		
S-153-S SEGURIDAD ELECTRICA EN EL RANCHO - Same as S-153				X	X	
Sticker						
S-616-S ADVERTENCIA - Esta maquina es automaticamente controlada y puede empezar en cualquier momento. Same as S-616			X		X	

Summary of the California Occupational Safety and Health Act of 1973

CAL/OSHA - AB 150*

PURPOSE

The California Occupational Safety and Health Act of 1973 was enacted for the purposes of: a) assuring safe and healthful working conditions for all California working men and women by enforcement of effective standards, and by b) helping employers to maintain safe and healthful working conditions.

SECTION 1 - JURISDICTION AND DUTIES

The Agriculture and Services Agency is responsible for administering the CAL/OSHA plan. All enforcement and rulemaking authority will be with the Department of Industrial Relations.

In order to enforce and administer all standards and orders or special orders requiring places of employment to be safe and healthy, the Division of Industrial Safety has the power, jurisdiction, and supervision over every place of employment in this state.

The Division, in enforcing occupational safety and health standards, may do any of the following:

(A) Declare and prescribe what safety devices are well adapted to render the employees or places of employment safe.

(B) Enforce standards and orders adopted by the Standards Board for the installation, maintenance and operation of safeguards.

(C) Require the performance of any act which the protection of the safety of the employees reasonably demands.

INSPECTIONS

When the Division of Industrial Safety learns or has reason to believe that any employment is not safe, it may, on its own motion or upon complaint, investigate with or without notice or hearing.

Only the chief or, in the case of his absence, his authorized representatives will have the authority to permit advance notice of an inspection or investigation. In no case, except when there is imminent danger to an employee, is advance notice to be given when an inspection is to be made as a result of an employee complaint.

Any person who gives advance notice without authority of any inspection to be conducted, is guilty of a misdemeanor and upon conviction, shall be fined not more than $1,000 or by imprisonment for not more than six months or by both.

*Enabling legislation required by the California Occupational Safety & Health Plan.

All information obtained by the Division of Industrial Safety in connection with any inspection which might reveal a trade secret, shall be considered confidential.

To make an investigation or inspection, Division representatives, upon presenting appropriate credentials to the employer, have free access to any place of employment. Any person who obstructs or hampers such an investigation or inspection is guilty of a misdemeanor.

Any employer who neglects or refuses to furnish statistics which are directly related to the purpose of the investigation or inspection, or who refuses to admit the authorized representatives engaged in the performance of their duties to a place of employment, is guilty of a misdemeanor.

Representatives of both the employer and the employees have the right to accompany any Division representative while he makes an inspection. They can also discuss safety violations or problems with the inspector privately during the course of an inspection. If there is no employee representative, the inspector may consult with a reasonable number of employees on his inspection.

CITATION

If, upon inspection, the Division feels that an employer has violated any standard, rule, order, or regulation it shall issue a citation. Each citation shall be in writing and describe the violation, including reference to the provision of the code alleged to have been violated. In addition, the citation will fix a reasonable time for the abatement of the alleged violation.

In the event the violations found in an inspection do not have a direct relationship upon the health and safety of an employee, a "notice", in lieu of a citation, may be issued.

For each citation issued, a copy must be posted for three days or until the unsafe condition is abated, whichever is longer.

No citation or notice will be issued by the Division for a given violation after six months have elapsed since the occurrence of the violation.

The Division will maintain records which will supply inspectors with previous citations and notices issued to an employer.

If the Division issues a citation, it will notify the employer by certified mail of the citation, and the employer has 15 working days from receipt of the citation to notify the Appeals Board that he wishes to appeal.

If the Division issues a citation for a serious violation, the Division will reinspect at the end of the period of abatement of the violation.

INVESTIGATIONS

The Division will investigate the causes of any accident which is fatal to one or more employees or which results in a serious injury to five or more employees. (For definition of "serious injury" see page 8.)

The Division may investigate the causes of any other accident or illness which has caused serious injury, (for definition see page 8) or, which has a probability of causing serious injury, which directly or indirectly arises from employment.

Within the Division is a Bureau of Investigations. The Bureau is responsible for directing accident investigations involving violations of standards or orders in which there is a serious injury, a death, or request for prosecution by a Division representative. It is also responsible for preparing cases for prosecution.

The authorized representatives of the Bureau have the right to go into all places of employment necessary for the investigation and may collect any evidence they deem necessary for the investigation.

In any case where the Bureau is required to conduct an investigation when there is a serious injury or death, the results of the investigation shall be referred for appropriate action to the city or district attorney having jurisdiction.

COMPLAINTS

When the Division receives a complaint from an employee that a place of employment is unsafe, it will investigate as soon as possible but no longer than three working days, with or without notice or hearing. Complaints of serious hazards will take priority.

Accurate records will be maintained by the Division of all complaints, whether verbal or written. The complainant will be informed of any action taken by the Division and the reasons for such action.

Action against employees subsequent to complaints of unsafe conditions is forbidden under CAL/OSHA. The name of any person submitting a complaint regarding unsafe conditions shall be kept confidential upon the request of the person.

Employees will not be laid off or discharged for refusing to work where any safety or health standard is violated, and when such violation creates a hazard to the employee or his fellow employees.

Any employee who believes that he has been discharged or otherwise discriminated against, may file a complaint with the Labor Commissioner.

HAZARDOUS CONDITIONS: RESTRICTIONS

If the condition of any employment or the operation of equipment constitutes a serious menace to the employees, the Division may request the courts for an injunction restraining the operation until the condition is corrected.

If the Division believes a place of employment or equipment is dangerous or not properly guarded and constitutes an imminent hazard to employees, entry or use will be prohibited, and a conspicuous notice to that effect will be posted.

The notice shall not be removed except by an authorized representative of the Division or until the place or equipment is made safe with required safeguards. Any person who defaces or removes any notice issued by the Division is guilty of a misdemeanor punishable by a fine of up to $1,000 or one year in a county jail or both.

Once an imminent hazard exists and the use of the equipment has been prohibited, the employer may request and be granted an appeal hearing within 24 hours to review the validity of the Division's order.

SAFETY NOTICES

It is the duty of the Division to prepare a notice containing information regarding safety rules and regulations, including information concerning the nearest Division office, employees rights, or any other information the Division deems necessary. It shall be supplied to employers as soon as practical. The Division will promulgate regulations on the content, the required location, and number of notices which must be posted by employers. Sufficient posters in both English and Spanish shall be printed to supply employers.

SAFETY-HEALTH ORDERS, STANDARDS

The Division of Industrial Safety will enforce all occupational safety and health standards. General safety orders heretofore adopted by the Industrial Accident Commission or the Industrial Safety Board will continue to remain in effect, but they may be amended or repealed.

Other agencies may assist the Division in the enforcement of occupational safety and health standards upon written agreement with the Department of Industrial Relations. Authorized representatives of such agencies may then have right of access to enter any place of employment under the Division's jurisdiction.

If any representative of an agency operating under such an agreement becomes aware of an imminent hazard, he will notify the employer and his employees of the hazard and immediately notify the Division of Industrial Safety.

Nothing may limit or reduce the authority of local agencies to adopt and enforce higher standards relating to occupational safety and health for <u>their own</u> employees.

OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD

Within the Department of Industrial Relations is the Occupational Safety and Health Standards Board which consists of seven members who shall be appointed by the Governor.

All meetings held by the Board shall be open and public. Notice of the Standards Board meetings will be published in major newspapers. Interested people will be given time at the meetings to propose amendments or (new) standards that are appropriate for adoption.

The Board may adopt, amend or repeal occupational safety and health standards and orders.

The Board is the only agency in the state authorized to adopt occupational safety and health standards. The Board shall adopt standards at least as effective as the federal standards for all issues for which federal standards have been promulgated.

The Board shall refer for evaluation to the State Department of Health any proposed occupational health standard or variance from adopted standards received by the Board from sources other than the State Department of Health. The Board shall refer for evaluation to the Division of Industrial Safety any proposed occupational safety standard or variance received by the Board from sources other than the Division of Industrial Safety.

STATE DEPARTMENT OF HEALTH - ROLE

The State Department of Health, in connection with the enforcement of occupational safety and health standards, will:

(1) Upon request from the D.I.S., help in the inspection of specific workplaces in order to evaluate occupational health programs or environmental conditions which may be harmful to the health of employees.
(2) Upon request of the D.I.S., any employer or employee, or on its own initiative, conduct special investigations of occupational health problems which are unrelated to a specific enforcement type action to the extent that the circumstances indicate and priorities permit.
(3) Provide a continuing program of training for safety engineers of the D.I.S. in the recognition and handling of health hazards.

The State Department of Health may make written agreements with local health departments to conduct inspections and evaluations of occupational health problems.

The Occupational Safety and Health Standards Board will refer to the Department of Public Health for evaluation, any proposed occupational health standard or variance from an occupational health standard.

Connected with the development of occupational health standards, the State Department of Health will perform the following functions:

(a) Analyze federal occupational health standards and evaluate their impact on California.
(b) Maintain relations with the National Institute of Occupational Safety and Health (NIOSH) and federal OSHA in the development of recommended federal standards and, when appropriate, provide feedback.
(c) On occupational health issues not covered by federal standards, maintain surveillance, determine the necessity for standards, and develop and present proposed standards to the Board.

(d) Evaluate any proposed occupational health standard or application for a variance referred to it by the Division or Board.
(e) Appear and testify at Board hearings and other public proceedings involving occupational health matters.

SECTION 2 - EDUCATION AND RESEARCH

EDUCATION

The Division will maintain an education and research program for the purpose of providing in-service training of Division personnel, safety education for employers and employees, and research and consulting safety services.

The Division is responsible for preparation and distribution of information concerning occupational safety and health programs and methods. This information may include, but is not limited to, safety publications, films, speeches, etc.

Safety training programs will be provided by the Division upon request. Priority for the development of safety training programs will be with those occupational areas where the greatest hazards exist.

RESEARCH

The Division will conduct research into methods, means, operations, techniques, processes, and practices necessary for improvement of occupational safety and health.

CONSULTATION SERVICE

Upon request, the Division will provide safety and health consulting services to any employer or employee group. Such consulting services include providing employers or employees with information, advice, and recommendations on maintaining safe and healthful work practices.

If an employer requests consulting services, the Division, when providing such services, cannot institute any prosecution nor issue any citations for a violation of a standard or order. The <u>exception</u> is when the Division representative providing the consulting service finds the condition of employment or equipment constitutes an imminent hazard to the lives or safety of employees.

SECTION 3 - RESPONSIBILITIES OF EMPLOYERS AND EMPLOYEES

RESPONSIBILITIES AND DUTIES

<u>Every employer shall furnish employment and a place of employment which are safe and healthful for the employees therein</u>.

Every employer shall furnish and use safety devices and safeguards and shall adopt and use practices and processes which are adequate for the safety and health of his employees. The employer will do everything reasonable to protect the safety and health of his employees.

No employer may require or permit an employee to work in a place that does not meet safety and health standards, or which is not safe or healthful.

No employer shall neglect or fail:

(a) To provide and use safety devices and safeguards.
(b) To adopt and use safe methods and practices.
(c) To do everything possible to protect the life, safety, and health of his employees.

No employer, owner, or lessee of any real property will construct or cause to be constructed any place of employment that is not safe and healthful.

No person may do any of the following:

(a) Remove, displace, destroy or walk off with any safety device, or notice or warning.
(b) Interfere in any way with the use thereof by any other person.
(c) Interfere with the use of any method or process adopted for the protection of any employee, including himself.
(d) Fail or neglect to do every other thing to protect employees.

Every employer and every employee will comply with occupational safety and health standards and all rules, regulations, and orders which are applicable to his own actions and conduct.

INFORMATION

All employers will provide information to employees in the following ways, as prescribed by regulations:

(a) Posting of information regarding protections and obligations of employees under occupational safety and health laws.
(b) Posting prominently each citation issued.
(c) The opportunity for employees or their representatives to observe monitoring or measuring of employee exposure to hazards.
(d) Allow access by employees or their representatives to accurate records of employee exposures to potentially toxic materials.
(e) Notification of any employee who has been or is being exposed to toxic materials in levels exceeding those prescribed by an applicable standard, order, or special order, and informing any employee so exposed of corrective action being taken.

RECORDKEEPING

Every employer, insurer, and physician who attends any injured employee must file with the Division of Labor Statistics and Research a complete report of every injury or occupational illness to each employee arising out of or in the course of his employment, unless disability resulting from such injury does not last through the day or does not require medical service, other than ordinary first aid treatment.

In every case involving a serious injury, illness, or death, in addition to the report required, a report must be made immediately by the employer to the Division of Industrial Safety by telephone or telegraph.

Serious injury or illness shall be defined as any injury or illness occurring in connection with any employment which requires inpatient hospitalization for a period in excess of 24 hours for other than medical observation or, in which an employee suffers loss of any member of the body or any serious degree of permanent disfigurement. Excludes those resulting from violation of the Penal Code (except Section 385) or from an accident on a public street or highway.

Whenever a state, county or local fire or police agency is called to an accident involving an employee in which a serious injury or death occurs, the nearest office of the Division of Industrial Safety will be notified by telephone immediately by the responding agency.

The reports made to the Division of Labor Statistics and Research will be recorded in form and detail prescribed. All questions will be answered as required by the Division of Labor Statistics and Research under its rules and regulations.

All state and local government employers must maintain records and make reports in the same manner and to the same extent as required of other employers.

Nothing in this section requiring recordkeeping and reporting by employers shall relieve an employer of maintaining records and making reports to the Assistant Secretary, United States Department of Labor, as required under Federal Occupational Safety and Health Act of 1970 (P.L. 91-596).

No information furnished to the Division of Labor Statistics and Research by an employer or insurer will be open to the public. No report of injury required to be filed by an employer or insurer will be admissable as evidence in any adversary proceeding before the Workmen's Compensation Appeals Board.

SECTION 4 - PENALTIES

Except where other penalties are specifically provided, every employer, management official, or supervisor having direction or control of any employment, who does any of the following will be guilty of a misdemeanor:

(a) Knowingly or negligently violates any standard, order or special order, the violation of which is deemed to be a serious one.
(b) Repeatedly violates any standard or order which creates a real and apparent hazard to employees.

(c) Fails or refuses to comply, after notification and expiration of any abatement period, with any such standard, order, or special order where the failure or refusal creates a real and apparent hazard to employees.

Any employer who willfully violates any occupational health or safety standard, and whose violation causes death to an employee or permanent impairment will,

upon conviction, be fined not more than $10,000 or by six months in jail or both. On a second offense of this same nature, a penalty of not more than $20,000 or by imprisonment for not more than one year or both will be imposed.

Anyone making false statements on records filed or required to be maintained, shall, upon conviction, be fined not more than $10,000 or imprisonment of not more than six months or both.

A non-serious violation may be assessed a civil penalty of up to $1,000 for each such violation.

A serious violation shall be assessed a civil penalty of up to $1,000 for each such violation.

Any employer who willfully or repeatedly violates any occupational safety or health standard or order may be assessed a civil penalty of not more than $10,000 for each violation.

Failure to correct a violation of any occupational safety and health standard within the period permitted for correction may be assessed a civil penalty of not more than $1,000 for each day during which such failure or violation continues.

Any employer who violates any of the posting requirements will be assessed a civil penalty of up to $1,000 for each violation.

The civil penalties provided for in this section shall not be assessed against employers who are governmental entities.

SECTION 5 - VARIANCES

PERMANENT

Any employer may apply to the Standards Board for a permanent variance from an occupational safety or health regulation if he shows an alternative program or method which will provide equal or superior safety for employees.

The Occupational Safety and Health Standards Board will issue such a variance to an employer if it provides equal or superior safety conditions for the employees. A permanent variance may be modified.

TEMPORARY

A temporary variance can be granted by the Division of Industrial Safety if an employer establishes:

(a) that he is unable to comply because resources cannot be located by effective date for compliance with the standard,
(b) he is taking all available steps to safeguard his employees against hazards covered by the standard,
(c) he has an effective program for coming into compliance with the standard as quickly as practicable.

SECTION 6 - PROJECT PERMITS

REQUIREMENTS

For those places of employment which by their nature involve a substantial risk of injury, the Division will require the issuance of a permit prior to any work or employment.

Such employment will be limited to:

(a) Construction of trenches or excavations which are 5 feet or more deep into which a person is required to descend.
(b) The construction of any building, structure, falsework, or scaffolding work more than 3 stories high.
(c) The demolition of any building, structure, falsework, or scaffolding more than 3 stories high.

Any employer subject to the above shall apply to the Division of Industrial Safety for a permit.

The Division may investigate or confer prior to the start of actual work. A permit will be issued when an employer demonstrates safe methods will be used. On good cause, the Division may revoke any permit that has been issued. Any employer denied a permit may appeal such a denial.

SECTION 7 - APPEALS

OCCUPATIONAL SAFETY AND HEALTH APPEALS BOARD

The Occupational Safety and Health Appeals Board consists of three members, appointed by the Governor, representing management, labor and the general public. Each member will serve a term of four years.

APPEALS PROCEDURES

Any employer served with a citation or a notice of a civil penalty may appeal to the Appeals Board within 15 working days from receipt of such citation, or such notice, with respect to alleged violations, abatement periods and amount of proposed penalties.

If, within 15 working days from receipt of the citation or notice of penalty, the employer fails to notify the Appeals Board that he intends to contest the citation or penalty notice, and no notice is filed by any employee or employee representative within such time, the citation or notice of civil penalty shall be deemed a final order of the Appeals Board and not subject to review by any court or agency. The 15-day period may be extended by the Appeals Board for a good cause.

If an employer notifies the Appeals Board that he intends to contest a citation or notice of civil penalty, or if, within 15 workings of the issuance of a citation any employee or employee representative files a notice with the Division of Industrial Safety or the Appeals Board claiming that the specified abatement period is unreasonable, a hearing must be granted.

The Appeals Board or a hearing officer will, within 30 days after the case is submitted, make and file findings upon all facts involved in the appeal and file an order or decision.

Any person affected by an order or decision of the Appeals Board may, within the time limit specified, apply to the superior court for a writ of mandate for the purpose of inquiring into and determining the lawfulness of the original order or decision or of the order or decision following reconsideration.

The findings and conclusions of the Appeals Board on questions of fact are conclusive and final and are not subject to review. Such questions of fact will include ultimate facts and the findings and conclusions of the Appeals Board. Upon the hearing, the court shall enter judgment either affirming or annulling the order or decision, or the court may remand the case for further proceedings before the Appeals Board.

*PLEASE NOTE - This informational bulletin on A.B. 150 is an abstract and condensation of the complete law. For questions or details not covered, refer to a complete text of the law or contact Richard Wilkins, Chief of the Division of Industrial Safety, 455 Golden Gate Ave., San Francisco, 94102.(Tel.415-557-1946)

This information is excerpted from material compiled by the Safety and Health Services Department of the California State Compensation Insurance Fund.

FEDERAL OSHA

Directory of Regional and Field Offices of the Occupational Safety and Health Administration

Region I:

Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont.

Regional office:

Regional Administrator, U.S. Department of Labor, Occupational Safety and Health Administration, fourth floor, 18 Oliver St., Boston, Mass. 02110. Phone: 617—223–6712/3 or 4538/9.

Area offices:

Area Director, U.S. Department of Labor, Occupational Safety and Health Administration, Federal Bldg., Room 617, 450 Main St., Hartford, Conn. 06103. Phone: 203—244–2294.

Area Director, U.S. Department of Labor, Occupational Safety and Health Administration, Custom House Bldg., State St., Boston, Mass. 02109. Phone: 617—223–4511/4512.

Area Director, U.S. Department of Labor, Occupational Safety and Health Administration, Federal Bldg., room 425, 55 Pleasant St., Concord, N.H. Phone 603—224–1995/6.

District office:

U.S. Department of Labor, Occupational Safety and Health Administration, Federal Bldg., U.S. Courthouse—Room 503A, Providence, R.I. 02903. Phone: 401—528–4466.

Region II:

New York, New Jersey, Puerto Rico, Virgin Islands, and Canal Zone.

Regional office:

Regional Administrator, U.S. Department of Labor, Occupational Safety and Health Administration, 1515 Broadway (1 Astor Plaza), New York, N.Y. 10036. Phone: 212—971–5941/2.

Area offices:

Area Director, U.S. Department of Labor, Occupational Safety and Health Administration, 90 Church St., Room 1405, New York, N.Y. 10007. Phone: 212—264–9840/1/2.

Area Director, U.S. Department of Labor, Occupational Safety and Health Administration, Room 203—Midtown Plaza, 700 East Water St., Syracuse, N.Y. 13210. Phone: 315—473–2700/1.

Area Director, U.S. Department of Labor, Occupational Safety and Health Administration, 370 Old Country Rd., Garden City, Long Island, N.Y. 11530. Phone: 516—294–0400/1/2/3.

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Region III:

Delaware, District of Columbia, Maryland, Pennsylvania, Virginia, and West Virginia.

Regional office:

Regional Administrator, U.S. Department of Labor, Occupational Safety and Health Administration, 15220 Gateway Center, 3535 Market St., Philadelphia, Pa. 19104. Phone: 215—597–1201.

Area offices:

Area Director, U.S. Department of Labor, Occupational Safety and Health Administration, 1317 Filbert St., Suite 1010, Philadelphia, Pa. 19107. Phone: 215—597–4955.

Area Director, U.S. Department of Labor, Occupational Safety and Health Administration, 3661 Virginia Beach Blvd., Stanwick Bldg., Room 111, Norfolk, Va. 23502. Phone: 703—441–6381/2.

Area Director, U.S. Department of Labor, Occupational Safety and Health Administration, Room 8018, Federal Bldg., P.O. Box 10186, Richmond, Va. 23240. Phone: 703—782–2241/2.

Area Director, U.S. Department of Labor, Occupational Safety and Health Administration, Federal Bldg., Room 1110A, 31 Hopkins Plaza, Charles Center, Baltimore, Md. 21201. Phone: 301—962–2840.

Area Director, U.S. Department of Labor, Occupational Safety and Health Administration, Jonnet Bldg., Room 802, 4099 William Penn Highway, Monroeville, Pa. 15146. Phone: 412—644–2905/6.

Region IV:

Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, and Tennessee.

Regional office:

Regional Administrator, U.S. Department of Labor, Occupational Safety and Health Administration, 1375 Peachtree St. NE., Suite 587, Atlanta, Ga. 30309. Phone: 404—526–3573/4 or 3629/3620, or 5797/8.

Area offices:

Area Director, U.S. Department of Labor, Occupational Safety and Health Administration, 1371 Peachtree St. NE., Room 723, Atlanta, Ga. 30309. Phone: 404—526–5806/7 or 5883/4.

Area Director, U.S. Department of Labor, Occupational Safety and Health Administration, Bridge Bldg., Room 204, 3200 E. Oakland Park Blvd., Fort Lauderdale, Fla. 33308. Phone: 305—525–0611, extension 331.

Area Director, U.S. Department of Labor, Occupational Safety and Health Administration, 2809 Art Museum Dr., Suite 4, Jacksonville, Fla. 32207. Phone: 904—791–2895.

Area Director, U.S. Department of Labor, Occupational Safety and Health Administration, Commerce Bldg., Room 801, 118 North Royal St., Mobile, Ala. 35502. Phone: 205—433–3581, extension 482.

Area Director, U.S. Department of Labor, Occupational Safety and Health Administration, 600 Federal Pl., Room 561, Louisville, Ky. 40202. Phone: 502—582–6111/2.

Area Director, U.S. Department of Labor, Occupational Safety and Health Administration, 1361 East Morehead St., Charlotte, N.C. 28204. Phone: 704—372–0711, extension 495.

Area Director, U.S. Department of Labor, Occupational Safety and Health Administration, 1600 Hayes St., Suite 302, Nashville, Tenn. 37203. Phone: 615—749–5313.

Area Director, U.S. Department of Labor, Occupational Safety and Health Administration, Todd Mall, 2047 Canyon Rd., Birmingham, Ala. 35216. Phone: 205—822–7100.

Area Director, U.S. Department of Labor, Occupational Safety and Health Administration, Enterprise Bldg., Suite 200, 6605 Abercorn St., Savannah, Ga. 31405. Phone: 912—354–0733.

Region V:

Illinois, Indiana, Michigan, Minnesota, Ohio, and Wisconsin.

Regional office:

Regional Administrator, U.S. Department of Labor, Occupational Safety and Health Administration, 300 South Wacker Dr., Room 1201, Chicago, Ill. 60606. Phone: 312—353–4716/4717.

Area offices:

Area Director, U.S. Department of Labor, Occupational Safety and Health Administration, 300 South Wacker Dr., Chicago, Ill. 60606. Phone: 312—353–1390.

Area Director, U.S. Department of Labor, Occupational Safety and Health Administration, Bryson Bldg., Room 224, 700 Bryden Rd., Columbus, Ohio 43215. Phone: 614—469–5582.

Area Director, U.S. Department of Labor, Occupational Safety and Health Administration, Clark Bldg., Room 400, 633 West Wisconsin Ave., Milwaukee, Wis. 53203. Phone: 414—224–3315/6.

Area Director, U.S. Department of Labor, Occupational Safety and Health Administration, U.S. Post Office and Courthouse, Room 423, 46 East Ohio St., Indianapolis, Ind. 46204. Phone: 317—633–7384.

Area Director, U.S. Department of Labor, Occupational Safety and Health Administration, 847 Federal Office Bldg., 1240 East Ninth St. Cleveland, Ohio 44199. Phone: 216—522–3818.

Area Director, U.S. Department of Labor, Occupational Safety and Health Administration, Michigan Theatre Bldg., Room 626, 220 Bagley Ave, Detroit, Mich. 48226. Phone: 313—226–6720.

Area Director, U.S. Department of Labor, Occupational Safety and Health Administration, 110 South Fourth St., Room 437, Minneapolis, Minn. 55401. Phone: 612—725–2571.

Area Director, U.S. Department of Labor, Occupational Safety and Health Administration,

Federal Office Bldg., Room 5522, 550 Main St., Cincinnati, Ohio 45202. Phone: 513—684–2355.

Area Director, U.S. Department of Labor, Occupational Safety and Health Administration, Federal Office Bldg., Room 734, 234 N. Summit St., Toledo, Ohio 43604. Phone: 419—259–7542.

Region VI:

Arkansas, Louisiana, New Mexico, Oklahoma, and Texas.

Regional office:

Regional Administrator, U.S. Department of Labor, Occupational Safety and Health Administration, Texaco Bldg., seventh floor, 1512 Commerce St., Dallas, Tex. 75201. Phone: 214—749–2477/8/9 or 2567.

Area offices:

Area Director, U.S. Department of Labor, Occupational Safety and Health Administration, Federal Bldg., Room 6B1, 1100 Commerce St., Dallas, Tex. 75202. Phone: 214—749–1786/7/8.

Area Director, U.S. Department of Labor, Occupational Safety and Health Administration, Federal Bldg., Room 421, 1205 Texas Ave., Lubbock, Tex. 79401. Phone: 806—747–3711, extension 3681.

Area Director, U.S. Department of Labor, Occupational Safety and Health Administration, Petroleum Bldg., Room 512, 420 South Boulder, Tulsa, Okla. 74103. Phone: 918—584–7151, extension 7676.

Area Director, U.S. Department of Labor, Occupational Safety and Health Administration, 307 Central National Bank Bldg., Houston, Tex. 77002. Phone: 713—226–5431.

Area Director, U.S. Department of Labor, Occupational Safety and Health Administration, 546 Carondelet St., Fourth floor, New Orleans, La. 70130. Phone: 504—527–2451/2 or 6166/7.

District office:

U.S. Department of Labor, Occupational Safety and Health Administration, U.S. Custom House Bldg., Room 325, Galveston, Tex. 77550. Phone: 713—763–1472/4.

Region VII:

Iowa, Kansas, Missouri, and Nebraska.

Regional office:

Regional Administrator, U.S. Department of Labor, Occupational Safety and Health Administration, 823 Walnut St., Waltower Bldg., Room 300, Kansas City, Mo. 64106. Phone: 816—374–5249/5240.

Area offices:

Area Director, U.S. Department of Labor, Occupational Safety and Health Administration, 1627 Main St., Room 1100, Kansas City, Mo. 64108. Phone: 816—374–2756.

Area Director, U.S. Department of Labor, Occupational Safety and Health Administration, 210 North 12th Blvd., Room 554, St. Louis, Mo. 63101. Phone: 311—622–5461.

Area Director, U.S. Department of Labor, Occupational Safety and Health Administration, City National Bank Bldg., Room 803, Harney and 16th Sts., Omaha, Nebr. 68102. Phone: 402—221–3276/7.

Region VIII:

Colorado, Montana, North Dakota, South Dakota, Utah, and Wyoming.

Regional office:

Regional Administrator, U.S. Department of Labor, Occupational Safety and Health Administration, Federal Bldg., Room 15010, P.O. Box 3588, 1961 Stout St., Denver, Colo. 80202. Phone: 303—837–3883.

Area offices:

Area Director, U.S. Department of Labor, Occupational Safety and Health Administration, Squire Plaza Bldg., 8527 West Colfax Ave., Lakewood, Colo. 80202. Phone: 303—234–4471.

Area Director, U.S. Department of Labor, Occupational Safety and Health Administration, Executive Bldg., Suite 309, 455 East Fourth South, Salt Lake City, Utah 84111. Phone: 801—524–5080.

Area Director, U.S. Department of Labor, Occupational Safety and Health Administration, Petroleum Bldg., Suite 525, 2812 First Avenue North, Billings, Mont. 59101. Phone: 406—245–6711, extensions 6640/6649.

Region IX:

Arizona, California, Hawaii, Nevada, Guam, American Samoa, and Trust Territory of the Pacific Islands.

Regional office:

Regional Administer, U.S. Department of Labor, Occupational Safety and Health Administration, 9470 Federal Bldg., 450 Golden Gate Ave., Box 36017, San Francisco, Calif. 94102. Phone: 415—556–0584/4427.

Area offices:

Area Director, U.S. Department of Labor, Occupational Safety and Health Administration, 100 McAllister St., Room 1706, San Francisco, Calif. 94102. Phone: 415—556–0536.

Area Director, U.S. Department of Labor, Occupational Safety and Health Administration, Amerco Towers, Suite 910, 2721 N. Central Ave., Phoenix, Ariz. 85004. Phone: 602—261–4857/8.

Area Director, U.S. Department of Labor, Occupational Safety and Health Administration, Hartwell Bldg., Room 514, 19 Pine Ave., Long Beach, Calif. 90802. Phone: 213—432–3434.

Area Director, U.S. Department of Labor, Occupational Safety and Health Administration, 333 Queen St., Suite 505, Honolulu, Hawaii 96813. Phone: 808—546–3157/8.

Region X:

Alaska, Idaho, Oregon, and Washington.

Regional office:

Regional Administrator, U.S. Department of Labor, Occupational Safety and Health Administration, 506 Second Ave., 1808 Smith Tower Bldg., Seattle, Wash. 98104. Phone: 206—442–5930.

Area offices:

Area Director, U.S. Department of Labor, Occupational Safety and Health Administration, 506 Second Ave., 1906 Smith Tower Bldg., Seattle, Wash. 98104. Phone: 206—442–7520/7527.

Area Director, U.S. Department of Labor, Occupational Safety and Health Administration, Federal Bldg., Room 227, 605 West Fourth Ave., Anchorage, Alaska 99501. Phone: 907—272–5561, extension 851.

Area Director, U.S. Department of Labor, Occupational Safety and Health Administration, Pittock Block, Room 526, 921 SW., Washington St., Portland, Oreg. 97205. Phone: 503—221–2251.

Directory of Regional Offices of the Bureau of Labor Statistics

Region I:

Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont.

Regional office:

Regional Director, U.S. Department of Labor, Bureau of Labor Statistics, 1603 JFK Federal Bldg., Government Center, Boston, Mass. 02203. Phone: 617—223–6727

Region II:

New Jersey, New York, Puerto Rico, and Virgin Islands.

Regional office:

Regional Director, U.S. Department of Labor, Bureau of Labor Statistics, 1515 Broadway, New York, N.Y. 10036. Phone: 212—971–5401.

Region III:

Delaware, District of Columbia, Maryland, Pennsylvania, Virginia, and West Virginia.

Regional office:

Regional Director, U.S. Department of Labor, Bureau of Labor Statistics, 3535 Market St., P.O. Box 13309, Philadelphia, Pa. 19101. Phone: 215—597–1151.

Region IV:

Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, and Tennessee.

Regional office:

Regional Director, U.S. Department of Labor, Bureau of Labor Statistics, 1371 Peachtree St. NE., Suite 540, Atlanta, Ga. 30309. Phone: 404—526–5416.

Region V:

Illinois, Indiana, Michigan, Minnesota, Ohio, and Wisconsin.

Regional office:

Regional Director, U.S. Department of Labor, Bureau of Labor Statistics, 300 South Wacker Dr., eighth floor, Chicago, Ill. 60606. Phone: 312—353–7226.

Region VI:

Arkansas, Louisiana, New Mexico, Oklahoma, and Texas.

Regional office:

Regional Director, U.S. Department of Labor, Bureau of Labor Statistics, 1100 Commerce St., Room 6B7, Dallas, Tex. 75202. Phone: 214—749–3641.

Region VII/VIII:

Colorado, Iowa, Kansas, Missouri, Montana, Nebraska, North Dakota, South Dakota, Utah, and Wyoming.

Regional office:

Regional Director, U.S. Department of Labor, Bureau of Labor Statistics, Federal Office Bldg., 911 Walnut St., Kansas City, Mo. 64106. Phone: 816—374–2378.

Region IX/X:

Arizona, Alaska, California, Hawaii, Idaho, Nevada, Oregon, and Washington.

Regional office:

Regional Director, U.S. Department of Labor, Bureau of Labor Statistics, 450 Golden Gate Ave., Box 36017, San Francisco, Calif. 94102. Phone: 415—556–3178.

U.S. DEPARTMENT OF LABOR
OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION

Form Approved
OMB No. 044R1449

For Official Use Only		
Area	Date Received	Time
Region	Received By	

COMPLAINT

This form is provided for the assistance of any complainant and is not intended to constitute the exclusive means by which a complaint may be registered with the U.S. Department of Labor.

The undersigned *(check one)*

☐ Employee ☐ Representative of employees ☐ Other *(specify)* _____

believes that a violation at the following place of employment of an occupational safety or health standard exists which is a job safety or health hazard.

Does this hazard(s) immediately threaten death or serious physical harm? ☐ Yes ☐ No

Employer's Name _____

Address (Street _____ Telephone _____

(City _____ State _____ Zip Code _____

1. Kind of business _____

2. Specify the particular building or worksite where the alleged violation is located, including address. _____

3. Specify the name and phone number of employer's agent(s) in charge.

4. Describe briefly the hazard which exists there including the approximate number of employees exposed to or threatened by such hazard.

(Continue on reverse side if necessary)

Sec. 8(f)(1) of the Williams-Steiger Occupational Safety and Health Act, 29 U.S.C. 651, provides as follows: Any employees or representative of employees who believe that a violation of a safety or health standard exists that threatens physical harm, or that an imminent danger exists, may request an inspection by giving notice to the Secretary or his authorized representative of such violation or danger. Any such notice shall be reduced to writing, shall set forth with reasonable particularity the grounds for the notice, and shall be signed by the employees or representative of employees, and a copy shall be provided the employer or his agent no later than at the time of inspection, except that, upon request of the person giving such notice, his name and the names of individual employees referred to therein shall not appear in such copy or on any record published, released, or made available pursuant to subsection (g) of this section. If upon receipt of such notification the Secretary determines there are reasonable grounds to believe that such violation or danger exists, he shall make a special inspection in accordance with the provisions of this section as soon as practicable, to determine if such violation or danger exists. If the Secretary determines there are no reasonable grounds to believe that a violation or danger exists he shall notify the employees or representative of the employees in writing of such determination.

(Continued on reverse side)

Form OSHA-7
Sept. 1971

5. List by number and/or name the particular standard *(or standards)* issued by the Department of Labor which you claim has been violated, if known.

6. (a) To your knowledge has this violation been considered previously by any Government agency? _____

(b) If so, please state the name of the agency _____

(c) and, the approximate date it was so considered. _____

7. (a) Is this complaint, or a complaint alleging a similar violation, being filed with any other Government agency?

(b) If so, give the name and address of each. _____

8. (a) To your knowledge, has this violation been the subject of any union/management grievance or have you *(or anyone you know)* otherwise called it to the attention of, or discussed it with, the employer or any representative thereof? _____

(b) If so, please give the results thereof, including any efforts by management to correct the violation. _____

9. Please indicate your desire:

☐ I do not want my name revealed to the employer.

☐ My name may be revealed to the employer.

Continue Item 4 here, if additional space is needed.

Signature _____ Date _____

Typed or Printed Name _____

If you are a representative of employees,
state the name of your organization _____

Address (Street _____ Telephone _____

(City _____ State _____ Zip Code _____

GPO 918-417

U.S. DEPARTMENT OF LABOR
Occupational Safety and Health Administration

CSHO NO.	OSHA-1 NO.	FY
AREA	REGION	

1.

CITATION

TO: 2.

3. Citation Number _____

4. Page _____ of 5. _____

6.

TYPE OF ALLEGED VIOLATION(S):

An inspection was made on 7. _____ 19 __ of a place of employment located at:

8. _____ and described as follows:

9. _____

On the basis of the inspection it is alleged that you have violated the Occupational Safety and Health Act of 1970, 29 U.S.C. 651 *et seq.*, in the following respects:

10. Item number	11. Standard, regulation or section of the Act allegedly violated	12. Description of alleged violation	13. Date by which alleged violation must be corrected

The law requires that a copy of this citation shall be prominently posted in a conspicuous place at or near each place that an alleged violation referred to in the citation occurred. The citation must remain posted until all alleged violations cited therein are corrected, or for 3 working days*, whichever period is longer.

RIGHTS OF EMPLOYEES

Any employee or representative of employees who believes that any period of time fixed in this citation for the correction of a violation is unreasonable has the right to contest such time for correction by submitting a letter to the U.S. Department of Labor at the address shown above within 15 working days* of the issuance of this citation.

"No person shall discharge or in any manner discriminate against any employee because such employee has filed any complaint or instituted or caused to be instituted any proceeding under or related to this Act or has testified or is about to testify in such proceeding or because of the exercise by such employee on behalf of himself or others of any right afforded by this Act." Sec. 11(c)(1) of the Occupational Safety and Health Act of 1970, 29 U.S.C. 651, 660(c)(1).

*Under the Occupational Safety and Health Act, the term "Working Day" means Mondays through Fridays but does not include Saturdays, Sundays, or Federal Holidays.

14.

Area Director's Signature _____ Issuance Date _____ 19 _____

Equipment Used by Compliance Safety and Health Officers and Industrial Hygienists

Equipment List for Each Compliance Officer

Combustible gas indicator—dual range 0–100 L.E.L. & 0–10 L.E.L.
Sound level meter calibrator.
Air velocity meter (0–2500 fpm)—Alnor Jr.
Universal test pump.
Detector tubes—(NIOSH calibrated or certified)—CO, CO_2, SO_2, H_2S, NO_2, Ozone.
Camera—Instamatic or Polaroid.
Continuity tester and flashlight.
Receptacle ground tester.
Ground loop impedence tester.
Biomedical field probe.
Light meter (0–500 ft. candles) GE–213.
Pocket polariscope.
Air ventilation gauge.
Ventilation smoke tubes.
Steel tape (8 ft.) or folding rule.
Stop watch.
Pocket thermometer.
Tachometer.
Coveralls—(flame retardant treated).
Earmuffs or plugs.
Hard hat or cap.
TDI analysis kit (contains expendable reagents).
Filter shipping cases for cassettes.
Midget impingers with carrying case.
Midget impinger holsters.
Glass sampling bubblers.
Wet chemistry kit for impingers and bubblers with mailable cases—(on special request from NIOSH, Salt Lake City laboratory).
Pipette sets.
Filter holder cassettes—2 and 3 piece.
Filters (expendable)—Millipore Type AA, Millipore Type HA, MSA Type FWS–B (from NIOSH Salt Lake City laboratory only), Gelman Type A, Gelman Type VM–1.
Flotronic silver membrane (from NIOSH Salt Lake City laboratory only).
Rubber stoppers.
Critical orifice, set—7.4 1/m, 9.0 1/m, 13.0 1/m.
Anemotherm, air meter (0–8,000 fpm) heated wire.
Extension cord sets (3 wire)—25 ft., 50 ft.
Burette set for pump calibration—100 ml Burette, 1000 ml Burette, support stand, clamps.
Precision light meter—(GE X–100).
Test tubes, pyrex, flare top—10 ml graduated, Fisher #14–905A; 125 ml X–15 mm, Fisher #14–955D.
Charcoal tubes for solvents (expendable).
Charcoal tube holder.
Beaker—800 ml.
Safety shoes.
Safety glasses.
Protective gloves.
Respirators.
Life jacket (as needed).
Carrying case for field equipment.

Supplemental List for Construction Industry Compliance Officers

Vernier calipers.
Combination square and protractor with level.
Steel tape—50 ft.
Wire rope wear gauge.
Methaneometer and calibrator. Requires NIOSH issue and calibration.
Self-rescuer respirator.

Supplemental List for Industrial Hygienists

5 Audio dosimeters.
1 Audio dosimeter reader.
5 Personal sampling pumps—MSA Model G with pulsation dampener.
5 Personal sampling chargers or 1 manifold charger.
5 Holder assemblies—complete with cyclone and sampling line.
5 Coupler assemblies for cyclone.
6 10 mm nylon cyclones.
6 ½-inch steel cyclones.
Pump for charcoal tubes.
Carbon monoxide indicator and accessories.
Carbon monoxide indicator charger.
Carbon monoxide indicator calibration gas (50 to 100 ppm)—expendable.

Supplemental List for Each Area Office and Field Station

1 Polaroid print copier.
Combustible gas indicator calibrator.
2 Gast pumps (Model 1531).
Cahn electrobalance-microbalance.

Miner's cap with lamp, battery, and charger.
Precision rotameter.
Desiccator with cover.
Desiccator porcelain plate.
Thermometer kit—(Black globe—NIOSH specifications).
Impact noise meter.
Vertical elutriator.
Rotating vane anemometer.
Beta-gamma radiation meter.
Cutie—Pie.
Binoculars.
Inclinometer.
Rustrack strip chart recorder with battery pack and shielded cable.
Oxygen meter.
Mercury vapor, dector (battery powered) with charger.
5 Pocket self reading dosimeters for radiation (0–200 mrem).
1 Dosimeter charger.
Volt, ohm milliampmeter.
1 lb. drierite (for desiccator).

Supplemental List of Equipment for Each Regional Office

Octave band analyzer with microphone.
Staplex hi-vol sampler and accessories.
Electrostatic sampler, attachment—Del electronics.

494-156 O—72——6

Occupational Safety and Health Publications, U.S. Department of Labor

Copies of the following publications are available free of charge in limited quantities from Administrative Services—Distribution, Occupational Safety and Health Administration, U.S. Department of Labor, Washington, D.C., 20210, unless otherwise indicated.

Occupational Safety and Health Act of 1970 PL 91-596. (OSHA 2001).

Recordkeeping Requirements Under the Williams-Steiger Occupational Safety and Health Act of 1970. (OSHA 2002). A booklet describing the recordkeeeping responsibilities of employers. Copies of the OSHA recordkeeping forms and a display poster stating the purpose and scope of the Occupational Safety and Health Act are included.

Fact Sheet for Small Businesses on Obtaining Compliance Loans. (OSHA 2005). A 2-page flyer outlining the procedures on how small businesses can obtain OSHA assistance in applying for Small Business Administration loans to aid them in meeting OSHA standards.

Compliance Operations Manual. (OSHA 2006). A manual containing specific guidelines for all OSHA regional and area personnel to follow in implementing the Occupational Safety and Health Act of 1970, procedures for processing contested cases with the review commission, and information regarding citations, proposed penalties, and other OSHA activities. Arrangement for purchase should be made through the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C., 20402.

Safety and Health Standards for Agriculture. (OSHA 2009). A booklet containing the complete text of the safety standards applicable to agriculture, Reprint from the Federal Register, May 29, 1971.

The Farm Employer and the Occupational Safety and Health Act of 1970. (OSHA 2010). A folder showing the four agricultural safety standards and rights and obligations of farmers under the Occupational Safety and Health Act.

The Safe use of Anhydrous Ammonia. (OSHA 2011). A folder describing the injury potential of anhydrous ammonia fertilizer. Other sections contain information on what precautions to take to prevent accidents and what to do if an accident does occur while using this product.

Recordkeeping Requirements for Farmers Under the Williams-Steiger Occupational Safety and Health Act of 1970. (OSHA 2012). A booklet explaining the recordkeeping responsiblities of farm employers. Copies of the OSHA recordkeeping forms and a display poster stating the purpose and the scope of the Occupational Safety and Health Act are included.

Inspection! (OSHA 2026). A walkaround with an OSHA compliance officer is described in this 8-page publication.

Setting New Standards for Job Safety and Health. (OSHA 2027). A 4-page folder outlining the procedure for developing new safety standards or updating old ones.

The Target Industries: Profiles of Five Hazardous Occupations. (OSHA 2034). A 24-page booklet illustrating the safety problems of the five target industries—those with high injury-frequency rates. Industries discussed are longshoring, meat processing, lumber and wood products, manufacturing mobile homes, and roofing and sheet metal contract work.

Scientific Equipment Aids OSHA Compliance Efforts. (OSHA 2049). An 8-page booklet on the special equipment used by OSHA compliance officers to measure potentially dangerous gases, fumes, vapors, dusts, and noises.

How States Plan for Job Safety and Health. (OSHA 2050). A 7-page booklet which briefly comments on the criteria and standards for State plans for job safety and health.

Target Health Hazards. (OSHA 2051). A 16-page booklet containing some facts about five hazardous workplace substances (asbestos, carbon monoxide, cotton dust, inorganic lead, and silica) which make up OSHA's Target Health Hazards Program.

Careers in Safety and Health: The Industrial Hygienist. (OSHA 2052). A 12-page pamphlet illustrating the importance of industrial hygienists as specialists trained to detect and control health hazards in the workplace.

Careers in Safety and Health: The Occupational Nurse. (OSHA 2053). A 8-page pamphlet pointing out the need for the occupational nurse and describing her role with the new OSHA emphasis on healthful conditions on the jobsite.

The Principles and Techniques of Mechanical Guarding. (OSHA 2057). This bulletin outlines the principles of mechanical guarding. It contains illustrations showing the techniques of mechanical guarding as applied to specific machines. Single copies are available from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402, at 60¢ each.

Noise: The Environmental Problem—A Guide to OSHA Standards. (OSHA 2066). A reprint from the July-August 1972 edition of *Safety Standards* magazine, dealing with noise as a danger to physical and psychological health. OSHA noise regulations and standards are explained.

Guidelines for Setting Up Job Safety and Health Programs. (OSHA 2070). An 8-page booklet designed to establish guidelines to help employers develop and implement safety and health programs.

General Industry Guide for Applying Safety and Health Standards. (OSHA 2072). This 32-page booklet presents the standards broken down into six major categories—workplace standards, machines and equipment standards, materials standards, employee standards, power source standards, and process standards—and contains a section on administrative regulations of the act. The guide is designed to help users locate the standards that apply to their operations. This booklet is available from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402, at 55¢ each.

OSHA Advisory Committee Support and Operations Man-

ual. (OSHA 2074). A guide and source of information for Department of Labor and Department of Health, Education, and Welfare personnel who are concerned with occupational safety and health programs. It may also serve as a guide and source of information for members, consultants, and experts of occupational safety and health advisory committees.

Job Safety & Health **(magazine). OSHA's official monthly magazine reports on the agency's programs, policies, and standards, as well as on developments and research in safety and health. Annual subscription rate is $4.50. Single copies are 40¢ each. To subscribe, send check or money order to the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402.**

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1. [] General Industry Regulations CFR 1910
2. [] Construction Regulations CFR 1926
3. [] Maritime Regulations CFR 1915
4. [] Occupational Safety & Health Act of 1970 [] Spanish
5. [] Recordkeeping Requirements under the Williams-Steiger Occupational Safety & Health Act of 1970 [] Spanish
6. [] What Every Employer Needs to Know About OSHA Recordkeeping
7. [] All About OSHA Handbook
8. [] OSHA Fact Sheet for Small Businesses on Obtaining Compliance Loans
9. [] The Target Health Hazards
10. [] OSHA Poster English [] Spanish
11. [] Noise A Guide to OSHA Standards
12. [] Guidelines for Setting Up Job & Safety Health Programs
13. [] General Industry Guide for Applying Safety & Health Standards
14. [] (Flyer) Occupational Safety & Health Subscription Service
15. [] a.(Flyer) Job Safety & Health
    b.(Magazine)
16. [] Trenching & Excavation Information Kit
    a. A Check List
    b. Contractor Planning
    c. Employer-Employee Safe Practices
    d. 15 Questions....Help Prevent Cave Ins
17. [] Training Requirements of the Occupational Safety & Health Standards
18. [] Questions & Answers to Part 1910 the General Industry Standards
19. [] The Principles & Techniques of Mechanical Guarding
20. [] Information on available films & training aids
21. [] Other_____

U. S. DEPARTMENT OF LABOR
Occupational Safety and Health Administration

22. ( ) OSHA and the Farmer (sheet)

23. ( ) The Farm Employer and the OSHA Act

24. ( ) Safety and Health standards for Agriculture

25. ( ) Agricultural Tractors Vol. 39 No. 24

26. ( ) Safety Standards for Pulpwood Logging (sheet)

27. ( ) How States plan for job safety and health

28. ( ) OSHA Training Institute #2100

29. ( ) a. Career Paths in the Department of Labor
b. The Industrial Hygienist #2052
c. The Occupational Nurse #2053

30. ( ) Job Safety and Health Training Materials (sheet)

31. ( ) Safety and Health Provisions for Federal Employees

32. ( ) Executive Order 11807

33. ( ) Rights and Responsibilities of Employees Under Cal/OSHA

34. ( ) The Employee and OSHA

35. ( ) Safety and Health Standards for Federal Supply Contracts

36. ( ) Scientific Equipment Aids OSHA Compliance Efforts

37. ( ) CFR 1903 Compliance Manual for Field Officers

38. ( ) CASPA Forms (Complaints on state administration of OSHA standards)

39. ( ) Fisher Safety Manual

40. ( ) Carcinogens Vol. 39 No. 20

41. ( ) Vinyl Chloride Standards Vol. 39 No. 194

42. ( ) Asbestos: Airborne Danger

43. ( ) Safe Use of Anhydrous Ammonia

44. ( ) General Industry Digest #2201

45. ( ) Construction Industry Digest #2202

46. ( ) A Handy Reference Guide to the Williams-Steiger Act of 1970

47. ( ) Safety & Health in Excavating and Trenching

48. ( ) Safety & Health in Trenching and Excavation—Selected References

49. ( ) Title 8 Division of Industrial Safety Construction Orders

50. ( ) a. Cave-In Hazards (sheet)
b. Cave-Ins are Killers (poster)

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Initiating an Occupational Health Complaint with NIOSH

The work place may contain a multitude of potentially hazardous fumes, vapors, dusts, chemicals, or gases that may seriously affect the health of workers. Since many occupational diseases have a gradual onset which may not be disabling for many years, the relationship between "cause" and "effect" becomes hard to pin down. Union officers must be alert for symptoms of disease, or presence of potentially toxic substances, and move accordingly.

Although the usual and generally quickest way to proceed is to file a complaint with the Federal or State Occupational Safety and Health Administration, there is an alternate procedure which may be appropriate in certain cases. A request for a hazard evaluation can be submitted to the National Institute for Occupational Safety and Health (NIOSH). A description of NIOSH responsibilities and suggestions for when it might be advantageous to use their services is presented below.

Description of NIOSH Procedure

Upon request from an employer or employee representative, NIOSH will initiate the following activities:

1. Check to see if any other State or Federal agency has been or is currently involved with the problem. If so, that agency is contacted and further activities are coordinated.

2. The employer is notified that a NIOSH officer is coming to the workplace for an initial physical inspection. If the action was initiated by an employee, the employee representative is also contacted and a suitable time is arranged. (The employees name will be withheld if requested).

3. The NIOSH officer visits the site. (He has the legal right of entry.) The employee representative has the right to accompany him, unless in the judgment of the officer, it would interfere with the fair and orderly physical inspection. The same applies to the employer.

4. An observational survey of the workplace is conducted with these representatives to elucidate the extent of the problem and to determine the number and type of environmental samples to be collected. Employee interviews are conducted to identify adverse symptomatology experienced by the workers.

5. On the basis of the survey, sampling, analytical, and medical tests are derived and conducted by NIOSH to determine the concentration of substance found and the potentially toxic effects to affected employees.

Results of Study

1. Concentrations of the substances found in the place of employment and the conditions of use are identified and set forth where appropriate.

2. A statement of whether such substances have potentially toxic effects in such concentrations, as well as the basis for such judgments is provided.

3. A full report of the study including recommendations for controlling observed hazards, if appropriate, is sent to the employer; representative of the employees; and OSHA (or State).

4. The results must be posted at the site of the hazard for 30 days, or the affected employees must be notified by mail by NIOSH.

Limitations of NIOSH

1. NIOSH cannot issue citations or levy fines.

2. A study can be conducted only where there is a problem due to a chemical substance. NIOSH does not deal with physical agents (e.g., noise, guarding, trenches, etc.)

When to Request an Evaluation

There are certain situations when it is an advantage to contact NIOSH.

1. If OSHA or State inspections have determined that levels of exposure are below standards but employees are experiencing health problems, NIOSH can recommend changes in present standards. Whereas OSHA must treat exposure to a number of toxic substances as additive, NIOSH is bound by no such restriction.

2. Where the primary evidence of a health problem is the symptomatology of workers, NIOSH can conduct medical exams as well as take samples.

3. Where no standards exist, NIOSH can recommend new standards (currently, all dusts without established TLV's are treated as nuisance dusts).

4. Where management has been responsive to union safety requests, NIOSH surveys offer them a chance to abate a hazardous condition without the threat of immediate penalties. OSHA has been generous in all owing time to abate in such cases before conducting their own inspections.

5. Although this procedure may slow down correction of hazardous conditions in some cases (OSHA cannot cite using NIOSH data) the data accumulated from such a study is valuable evidence against the employer in proving lack of "good faith" and "willful" violations.

Information

Bobby F. Craft, Ph.D., Director
Division of Technical Services
National Institute for Occupational Safety and Health
Post Office Building; Room 506
Cincinnati, Ohio 45202

November 2, 1973
RA

U.S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
NATIONAL INSTITUTE FOR OCCUPATIONAL SAFETY AND HEALTH

REQUEST FOR HEALTH HAZARD EVALUATION

This form is provided to assist in registering a request for a health hazard evaluation with the U.S. Department of Health, Education, and Welfare as provided in Section 20(a)(6) of the Occupational Safety and Health Act of 1970 and 42 CFR Part 85. (See Statement of Authority on Reverse Side).

Name of Establishment Where Alleged Hazard(s) Exist _____

Company Address { Street _____ Telephone _____
City _____ State _____ Zip Code _____

1. Principal Company Activity _____
(manufacturing, construction, transportation, services, etc.)

2. Specify the particular building or worksite where the alleged hazard is located, including address _____

3. Specify the name and phone number of employer's agent(s) in charge.

4. Describe briefly the hazard(s) which exists by completing the following information:
Identification of Hazard or Toxic Substance(s) _____
Trade Name (If Applicable) _____ Chemical Name _____
Manufacturer _____ Does the material have a warning label? _____ Yes _____ No
If Yes, attach copy of label or a copy of the information contained on the label.
Physical Form: Dust ☐ Gas ☐ Liquid ☐ Mist ☐ Other ☐
Type of Exposure? Breathing ☐ Swallowing ☐ Skin Contact ☐
Number of People Exposed _____ Length of Exposure (Hours/Day) _____
Occupations of Exposed Employees _____

5. Using the space below describe further the nature of the conditions or circumstances which prompted this request and other relevant aspects which you may consider important, such as the nature of the illness or symptoms of exposure, the concern for the potentially toxic effects of a new chemical substance introduced into the workplace, etc.

NIOSH-4 (Cin)
9/72

FORM APPROVED
OMB NO. 68-R1236

6. (a) To your knowledge has this hazard been considered previously by any Government agency? _____

(b) If so, give the name and address of each.

_____

_____

(c) and, the approximate date it was so considered. _____

7. (a) Is this request, or a request alleging a similar hazard, being filed with any other Government agency? _____ (b) If so, give the name and address of each.

_____

_____

The undersigned (check one)

☐ Employer

☐ Authorized Representative of employees*

i ii iii (circle one)

believes that a substance (or substances) normally found at the following place of employment may have potentially toxic effects in the concentration used or found.

Signature _____ Date _____

Typed or Printed Name _____ Telephone: Home - _____

Address { Street _____ Business - _____

City _____ State _____ Zip Code _____

If you are a representative of employees, state the name and address of your organization.

_____

_____

Please indicate your desire:

☐ I do not want my name revealed to the employer.

☐ My name may be revealed to the employer.

Authority:

Section 20(a)(6) of the Occupational Safety and Health Act, (29 U. S. C. 669(a)(6)) provides as follows: The Secretary of Health, Education, and Welfare shall. . .determine following a written request by any employer or authorized representative of employees, specifying with reasonable particularity the grounds on which the request is made, whether any substance normally found in the place of employment has potentially toxic effects in such concentrations as used or found; and shall submit such determination both to employers and affected employees as soon as possible. If the Secretary of Health, Education, and Welfare determines that any substance is potentially toxic at the concentrations in which it is used or found in a place of employment, and such substance is not covered by an occupational safety or health standard promulgated under section 6, the Secretary of Health, Education, and Welfare shall immediately submit such determination to the Secretary of Labor, together with all pertinent criteria.

"Authorized representative of employees" means any person or organization meeting the conditions specified in 42 CFR Part 85.3 (b) (4) (i), (ii) or (iii):

(i) – that he is an authorized representative of, or an officer of the organization representing, the employees for purposes of collective bargaining; or

(ii) – that he is an employee of the employer and is authorized by two or more employees employed in the workplace where the substance is normally found, to represent them for purposes of the Act. Each such authorization shall be in writing and included in the request; or

(iii) – that he is one of three or less employees employed in the workplace where the substance is normally found.

Send the completed form to:

National Institute for Occupational Safety and Health
Hazard Evaluation Services Branch
U.S. Department of Health, Education, and Welfare
Cincinnati, Ohio 45202

☆ U.S. GOVERNMENT PRINTING OFFICE 1972 – [illegible]

Technical assistance and consultative services are provided to Federal, State, and local agencies, to individual employers and to employees upon request and through NIOSH initiated projects. This NIOSH program also determines health and safety problems for future research, especially where new compounds or processes are found or reported. A team approach is frequently used to evaluate the potential hazard of substances in the workplace and to evaluate the safety aspects of particular industries with some combination of industrial hygienists, physicians, safety specialists, chemists, toxicologists, physicists, and nurses. Additionally, technical information is disseminated for NIOSH and persons in industry or other government agencies.

HEALTH HAZARD EVALUATIONS

The NIOSH health hazard evaluation program initiated in 1971 under the authority of section 20(a)(6) of the Act is progressing in its mandate to determine whether substances in the workplace are potentially toxic in the concentrations used or found. Management and coordination of evaluation efforts are headquartered in Cincinnati with field evaluation efforts directed by industrial hygienists in seven of the 10 HEW regions.

The regulations prescribing the conditions and procedures for conducting health hazard evaluations pursuant to section 20(a)(6) of the act were published in the Federal Register on November 17, 1972 and went into effect 30 days later. They apply to requests received from any employer or authorized representative of employees in establishments covered by the Act.

During this program's first year of operation, 149 requests for hazard evaluations were received. Seventy-five requests, involving over 200 substances for toxic determination, were found to be valid requests as defined under section 20(a)(5) of the Act. Determinations (indications of health hazards) have been made in 22 of these requests, and the remaining 53 are in various stages of completion.

Where a health hazard is found or a health standard violated, recommendations, based on extensive field and laboratory investigations, are given to both management and OSHA to protect the health and safety of employees. In addition to serving the needs of the health hazard evaluation requestors, the results of these evaluations serve as a basis for identifying problems associated with new chemical agents that may need additional research, for developing criteria for new standards, or for validating existing standards.

INDUSTRIAL HYGIENE SERVICES

Consultation, technical assistance and other services related to industrial hygiene and engineering aspects of occupational health are provided to Federal, State, and local agencies, and to others upon request. The principal purpose of technical assistance is to assure the translation of research knowledge into control practice. Procedures in industrial hygiene related to collection of samples, measurements at the workplace, analysis of samples, and evaluating results are provided to employers and employees to assist them in recognizing, evaluating, and controlling real or potential health hazards at the workplace.

The major users of this service have been the Federal Government for whom occupational hazards of a wide variety have been investigated. Federal agencies were surveyed to determine levels of exposure to such potentially hazardous agents as noise, heat, asbestos, metal fumes, welding

fumes, ultraviolet radiation, X-radiation, solvents, carbon monoxide, ozone, microwaves, and various dusts.

Twenty-seven industrial hygiene surveys were conducted in 1972 affecting a total of approximately 2,000 workers, with 75 recommendations made to alleviate the existing conditions. Many requests for consultative services have been answered by letters or phone.

A series of manuals of good industrial hygiene practices are being developed under contracts. These include manuals for the following industrial processes: metal welding and cutting, electroplating, industrial metal cleaning using organic and inorganic compounds, ferrous foundries, nonferrous foundries, soldering and brazing, printing, and lead storage battery manufacturing. These manuals, written with a minimum of technical language, are designed to assist the employee and employer in recognizing and controlling work hazards.

Criteria for labeling all hazardous agents used or found in the workplace were developed after reviewing current practices. The Department of the Navy has worked cooperatively with NIOSH in the development of these requirements.

ACCIDENT PREVENTION SERVICES

Accident prevention services is the newest of the technical service programs within NIOSH, beginning in May 1972. Its primary function is to provide technical and consultative services to Government and industry on various approaches to prevent or reduce, in severity, injuries associated with machines, equipment, devices, and appliances used in the occupational environment.

During 1972, the accident prevention program assisted the Bureau of Solid Waste Management of the Environmental Protection Agency in a survey of working conditions and practices at six municipal incinerators in four States. Commensurate with this program's desire to work cooperatively with trade associations on matters of mutual concern, in joint effort with the Power Tool Institute and the National Association of Home Builders, a pamphlet emphasizing the safe use and storage of power tools has been developed for distribution to carpenters throughout the country.

Plans for the NIOSH accident prevention program include the formation of an occupational injury study group which will identify mechanical and/or physical agents within the occupational environment where exposure, normal use, or anticipated misuse has resulted in injuries or death to employees. Recommendations, based on the collected information, will be made and could include the need for new and/or revised standards, education and training programs, special studies or demonstration projects, and future research.

MEDICAL SERVICES

The NIOSH medical services program provides medical and nursing occupational health consultation to industry, unions, and other governmental units on request, as well as providing assistance on health hazard evaluations. This program devises and implements projects in a variety of occupational medicine and nursing areas and also provides medical support to other NIOSH activities as needed.

Medical evaluation of exposed workers is required in almost all of the NIOSH health hazard evaluations. These medical evaluations are designed to determine if the environmental concentration levels to which the workers are exposed are producing toxic effects. In 1972, 63 visits were made by NIOSH physicians and nurses to provide this support for health hazard evaluations.

Sixty-four visits were made by NIOSH physicians and nurses to provide occupational medical and nursing technical assistance to industry, labor unions, and governmental agencies. One such example involved a study of blood fractionation plants in the United States. An earlier study demonstrated that workers in one plant were experiencing an excessive number of cases of serum hepatitis. The current study will determine the extent and nature of the hepatitis problem in the plants under study to develop measures to control the hepatitis hazard.

A hospital occupational health and safety survey project initiated to provide information on the occupational health and safety services available to hospital workers who are exposed to many physical, chemical, and biological agents was continued in 1972. Seventy-three percent of the 3,600 hospitals contacted returned completed questionnaires. The data are now being analyzed.

TECHNICAL INFORMATION

Through the operation of a technical library and information system, technical information is pro-

vided to NIOSH and other governmental agencies, industrial management, labor unions, private citizens, attorneys, students and teachers, and foreign parties.

In 1972, answers were provided in response to about 700 formal requests for information. A project was initiated by contract to evaluate how well NIOSH is actually meeting the needs of information requesters. The development of a central file on occupational safety and health technical information, for both the professional and the nontechnical person, was initiated in 1972.

An agreement between NIOSH and the International Occupational Safety and Health Information Centre (CIS) of the International Labour Office in Geneva, Switzerland, was formally initiated in 1972. The agreement establishes NIOSH as the U.S. National Center of CIS and provides NIOSH with abstracts of international documents of occupational safety and health interest.

INTRODUCTION

Occupational exposures to toxic materials or harmful physical agents can result in illnesses which manifest themselves relatively rapidly and whose causes can be readily identified. The effects of long term exposures to low levels of such agents, or the latent effects of acute exposures are much more insidious and require a variety of detailed studies, both to ascertain that occupationally related health effects exist and to identify the determinants of these effects. The concern of the Congress with this area was expressed in Section 20 (a) (7) of the Ocupational Safety and Health Act which states:

> Within two years of enactment of this Act, and annually thereafter the Secretary of Health, Education, and Welfare shall conduct and publish industrywide studies of the effects of chronic or low level exposure to industrial materials, processes, and stresses on the potential for illness, disease, or loss of functional capacity in aging adults.

In accordance with the directive of this section, NIOSH has implemented a program of industrywide studies. The objectives of these studies are:

1. To determine the health experience of current or former workers.
2. To evaluate the industrial environment in terms of stressful agents present, degree of exposure, sources of contaminants, and controls presently employed.
3. To develop to the extent possible an exposure-response relation between each agent or combination of agents and incidence of specific diseases.
4. To devise medical examination procedures which will detect in employees the effects of exposures (either acute or chronic) to harmful agents. The emphasis is on detection of early, preclinical changes, or on methods to identify susceptible individuals.
5. To formulate sampling methods and environmental survey strategies which will characterize the environment as it relates to the health of individuals.

Such information is essential for the development of sound criteria for control of industrial exposures to noxious agents which encompass a recommended exposure standard, procedures for environmental evaluation, methods of medical surveillance, and engineering control measures.

SPECIFIC PROJECTS

Table 1 lists the industrywide studies which NIOSH has underway or planned for future action and summarizes the pertinent data concerning each. Examination of this listing shows the wide variety of industries and potential health hazards involved. The several different methodologic approaches utilized are also evident. Studies 1–9 are examples of use of existing records to ascertain rapidly if significant occupational health problems exist in the groups under study. Studies 10–26 are indepth multiple disciplinary investigations of situations where there is suspicion of, but poorly understood health effects or multiple hazards. Studies 27–31 are directed toward evaluating the effectiveness of present engineering procedures for controlling exposure to known hazardous agents. The numbers of persons included in each of these studies are only a portion of the total population potentially exposed. For example, the data obtained in the study of 59,000 steelworkers provides information on occupational hazards for a workforce in excess of 600,000.

TABLE 1.—*Industrywide epidemiological research studies*

Occupational group	Suspect agents	Biological response under investigation	Source of data	Number of individuals in study	Type of study	Implications to occupational safety and health
Industrial workers in Rhode Island.			Rhode Island disability insurance plan awards.	30, 000	Cross-sectional study of cause-specific morbidity.	Exploratory research into possible association between job classification and cause specific disability.
Printing pressmen	Benzene and other chemicals.	Malignancies of buccal cavity, esophagus, lymphatic and hematopoietic tissue and nonmalignant respiratory disease.	Death benefit file of International Printing Pressmen and Assts' Union of North America.	3, 000	Cross-sectional comparison of cause-specific proportionate mortality with that of general population.	Exploratory research into association be-between on-the-job exposures and disease manifestation.
Construction machinery operators.	Engine exhausts, whole body vibration and dusts of various kinds.	Malignant and nonmalignant respiratory disease.	Death benefit file of International Union of Operating Engineers.	2, 000	do	do
Stationary engineers.	Combustion products, carbon monoxide, heat and asbestos.	Malignancies, particularly of the respiratory system, cardiovascular-renal disease.	do	1, 000	do	do
Woodworkers	Wood dust	Malignancies of nasal pharynx, reticuloendothelial system and other sites.	A. Death benefit file of United Brotherhood of Carpenters and Joiners. B. Existing safety files of Department of Labor and compensation files of various States and insurance companies.	28, 000	do	do

Longshoremen	Physical activity	Cardiovascular and other chronic diseases.	Existing medical data and employment file of International Longshoremen's and Warehousemen's Union.	7, 000	Retrospective cohort study utilizing life table method to examine cause-specific mortality according to category of physical activity.	do
Dentists	X-radiation, mercury and anesthetics.	Leukemia and lymphatic malignancies, suicides and diseases of the nervous system.	Records of the American Dental Association.	100, 000	do	do
Gray-iron foundry workers.	Silica and iron oxide dusts, metal fumes and various chemicals.	Malignant and nonmalignant respiratory disease.	Pension and personnel files of several companies operating gray-iron foundries.	5, 000	Cross-sectional comparison of cause-specific proportionate mortality with that of general population.	do
Sheet metal workers.	Fibrous glass and asbestos.	Malignant and nonmalignant respiratory disease.	A. Membership file of Sheet Metal Workers' International Association.	5, 000	A. Retrospective cohort study utilizing life-table method to examine cause-specific mortality according to type of work performed.	A. Exploratory research into possible association between on-the-job exposures and death from specific causes.
			B. Sheet metal fabrication shops and construction job sites.		B. Environmental surveys.	B. Identification of materials in use, chemical exposures and noise in relation to the particular type of sheet metal work.
Machine tool operators.	Cutting oil mists	Malignant and nonmalignant respiratory disease.	A. Employment file of a large manufacturing plant.	24, 000	A. Retrospective cohort study utilizing life-table method to examine cause-specific mortality according to amount of exposure.	A. Initial analysis directed toward identifying associations between oil mists and disease manifestation. Data capable of supporting exposure-response relationship analyses.
			B. Medical survey of currently employed workers.	2, 500	B. Examination of currently employed workers utilizing X-rays, pulmonary function tests, and respiratory questionnaires.	B. Determination of health status of exposed workers and assessment of association between oil mist exposure and disease manifestation.

TABLE 1.—*Industrywide epidemiological research studies*—Continued

Occupational group	Suspect agents	Biological response under investigation	Source of data	Number of individuals in study	Type of study	Implications to occupational safety and health
Steelworkers	Coal tar pitch volatiles and a great variety of other exposures.	Malignancies and other causes of death.	Employment files of seven steel plants in Allegheny County, Pa.	59, 000	Retrospective cohort study utilizing life-table method to examine cause-specific mortality according to different work areas and job classification.	Initial analyses directed toward identifying association between job specific exposure and disease manifestation. Data capable of response relationship analyses.
Aluminum refinery workers.	Bauxite/alumina, fluorides, coal tar pitch volatiles, carbon monoxide, and other air contaminants.	Chronic respiratory disease, lung cancer.	A. Employment files of selected refineries.		A. Cross-sectional study of prevalence of pulmonary abnormalities.	A. Exploratory research into association between multiple exposures and disease manifestations.
			B. Examination of currently employed workers utilizing X-rays, pulmonary function tests, and respiratory questionnaires.		B. do	B. Exploratory research into association between multiple exposures and prevalence of pulmonary abnormalities.
			C. Aluminum refineries		C. Environmental surveys.	C. Assessment of status of inplant environmental controls and identification of appropriate sampling methods and strategies.
Uranium miners	Radon daughters	Malignant respiratory disease.	A. Physical examination and annual census of uranium industry and radon daughter measurements.	14, 000	A. Retrospective cohort study utilizing life-table method to examine cause-specific mortality.	A. Determination of exposure-response relationship between radon daughters and lung cancer risk.
			B. Annual sputum cytology examination.	2, 000	B. Regression analyses of atypical sputum and cumulative radiation exposure.	B. Determination of diagnostic value of sputum cytology as an early detector of lung cancer.

Potash miners and millers.	Diesel fumes and chemicals.	Malignant and non-malignant respiratory disease.	Employment files of seven potash mining companies.	5, 500	Retrospective cohort study utilizing life-table method to examine cause-specific mortality.	To evaluate question of association between underground mining and lung cancer.
Hard rock miners	Silica dust, radon daughters.	Malignant and non-malignant respiratory disease.	Employment files of mining companies.	12, 000	do	To determine the extent of lung cancer risk associated with very low levels of radon daughters.
Uranium mill workers.	Thorium 230	Malignancies of lymphatic system.	Employment files of three uranium companies.	3, 000	do	Confirmation of previous indications of an excess risk and the quantification of that risk.
Copper smelter workers.	A. Sulfur dioxide, arsenic trioxide.	A. Non-malignant and malignant respiratory disease.	A. Examination of currently employed non-ferrous smelter workers utilizing X-rays, pulmonary function tests, sputum cytology, and respiratory questionnaires.	1, 000	A. Cross-sectional study of prevalence of pulmonary abnormalities according to SO_2 and other air contaminant exposure levels.	A. Exploratory research into association between chronic SO_2 exposures and disease manifestation.
	B. Sulfur dioxide	B. Non-malignant respiratory disease.	B. Examination of newly employed non-ferrous smelter workers utilizing X-rays, pulmonary function tests, and respiratory questionnaires.	400	B. Longitudinal study of incidence of pulmonary abnormalities.	B. Exploratory research into association between current SO_2 exposure levels and incidence of pulmonary abnormalities.
Asbestos products workers.	Asbestos	Asbestosis, lung cancer, mesothelioma; other malignancies.	A. Personnel files of 10 asbestos products plants.	20, 000	A. Retrospective cohort study utilizing life-table method to examine cause-specific mortality.	A. Determination of association between asbestos exposure and a variety of disease responses, quantitation of that association and evaluation of cigarette smoking in etiology of asbestos related lung cancer risk.
			B. Examination of currently employed workers utilizing X-rays, pulmonary function tests and respiratory questionnaires.	2, 700	B. Cross-sectional study of prevalence of pulmonary abnormalities.	B. Determination of health status of asbestos plant workers and assessment of association between on-the-job exposures and disease

TABLE 1.—*Industrywide epidemiological research studies*—Continued

Occupational group	Suspect agents	Biological response under investigation	Source of data	Number of individuals in study	Type of study	Implications to occupational safety and health
Fibrous glass workers.	Fibrous glass	Malignant and nonmalignant respiratory disease.	A. Employment files of five fibrous glass plants.	7,000	A. Retrospective cohort study utilising life-table method to examine cause-specific mortality.	A. Evaluation of speculated association between fibrous glass exposure and malignant and nonmalignant respiratory disease.
			B. Examination of currently employed workers utilising X-rays, pulmonary function tests, and respiratory questionnaires.	500	B. Cross sectional study of prevalence of pulmonary abnormalities.	B. Determination of health status of fibrous glass workers and assessment of association between on-the-job exposures and disease manifestation.
			C. Five fibrous glass plants.		C. Comprehensive industrial hygiene survey and air sampling.	C. Assessment of status of in-plant environmental controls and to identify appropriate sampling methods and strategies.
Cotton workers:						
A. Cotton Ginning	A. Cotton dust	A. Byssinosis and chronic lung disease.	A. Examination of currently employed cotton gin workers and matched controls utilising X-rays, pulmonary function tests, and respiratory questionnaires.	700	A. Cross-sectional study of prevalence of pulmonary abnormalities and incidence of these conditions in a sub-cohort of 300 individuals according to dust exposure levels.	A. Exploratory research into the association between on-the-job exposures and disease manifestations.
B. Mattress industry.	B. do	B. do	B. Medical survey of currently employed workers.		B. do	B. do
C. Cotton textile Products.	C. do	C. do	C. Employment files of two cotton textile companies.	10,000	C. Retrospective cohort study utilising life-table method to examine cause-specific mortality.	C. do

Berylliun. production workers.	Beryllium	Berylliosis and malignant respiratory disease.	A. Employment files of 4 beryllium production plants.	8, 800	A. do	A. Evaluation of speculated association between beryllium exposure and lung cancer.
			B. Four beryllium production plants.		B. Comprehensive industrial hygiene survey and air sampling.	B. Assessment of status of in-plant environmental controls, identification of appropriate sampling methods and strategies.
Operating room personnel.	Halothane, nitrous oxide, and other anesthetic agents.	A. Miscarriages congenital anomalies and malignancies.	A. Examination of currently employed operating room personnel and appropriate control groups utilizing a questionnaire.	65, 000	A. Cross-sectional study of incidence of miscarriages, anomalies, and malignancies in operating room personnel before and after venting waste anesthetics.	A. Exploratory research regarding expected decrease in disease associated with reduction in trace concentrations of anesthetics.
		B. Alterations in psychological function.	B. Examination of currently employed operating room personnel utilizing battery of psychometric tests.		B. Cross-sectional comparison of trace concentrations of anesthetics with alteration in psychological functions.	B. Exploratory research regarding expected association between exposure to trace concentrations of anesthetics and alteration in psychological functions.
Bis(chloromethyl) ether workers.	Bis(chloromethyl) ether.	A. Malignancies, especially of lung.	A. Sputum cytology examination.	80	A. Cross-sectional study of cytological changes.	A. Rapid confirmation of human carcinogenicity of bis(chloromethyl) ether.
		B. do	B. Personnel file of a plant manufacturing anion exchange resins.		B. Retrospective cohort study utilizing life-table method to examine cause-specific mortality.	B. do
Dichloro benzidine workers.	3,3'-dichloro-benzidine.	Malignancies	A. Urine cytology examinations.		A. Cross-sectional study of cytological changes.	A. Evaluation of potential human carcinogenicity of 3,3'-dichlorobenzidine.
			B. Environmental surveys.		B. Evaluation of industrial hygiene control.	B. Evaluation of existing control procedures.

TABLE 1.—*Industrywide epidemiological research studies*—Continued

Occupational group	Suspect agents	Biological response under investigation	Source of data	Number of individuals in study	Type of study	Implications to occupational safety and health
Organic chemical workers.	Petro-chemicals, aliphatic hydro-carbon solvents.	Malignancies and other diseases.			Retrospective cohort study utilizing life-table method to examine cause-specific mortality.	Exploratory research into association between on-the-job exposures and disease manifestations.
Cosmetologists	Hair spray (PVP), hair dye (24TDA), and aerosol gases.	Malignancies of respiratory system, lymphatic system, bladder, nonmalignant respiratory disease and cardiac disease.	A. Connecticut State Department of Health (Registry and Licensure Division) and Tumor Registry.	10, 000	A. Retrospective cohort study utilizing life-table method to examine site-specific cancer incidence and cause specific mortality.	A. Confirmation of previous indications of an excess risk and the quantification of that risk according to usage of sprays and dyes.
			B. Examination of currently employed cosmetologists utilizing pulmonary function, X-ray, sputum cytology and electrocardiography.	800	B. Cross-sectional study of prevalence of pulmonary and cardiac abnormalities.	B. do
Welders	Iron oxide, fluoride, oxides of nitrogem.	Chronic lung disease.	Examination of currently employed workers utilizing X-rays, pulmonary function tests and respiratory questionnaires.	200	Cross-sectional study of prevalence of pulmonary abnormalities.	do
Granite Workers.	Granite dust.	Non-malignant respiratory disease.	Examination of currently exposed workers utilizing X-ray, pulmonary function tests, and respiratory questionnaires.	1, 000	Longitudinal medical study of incidence of pulmonary abnormalities to examine annual decrements in function at known exposure levels.	do

Benzidine workers.	Benzidine.	Malignancies of urinary tract.	State tumor registry records.	1, 500	Retrospective cohort study utilizing life table method to examine site specific cancer incidence.	Confirmation of previous indication of an excess risk and the quantification of that risk according to usage of specific dye intermediates.
Beta naphthylamine workers.	Beta naphthylamine.	Malignancies of urinary tract.	Urinary cytology examinations.	100	Longitudinal study of incidence of urinary abnormalities.	do
Abattoir workers.	Brucella suis and abortus.	Brucellosis.	Examination of currently employed abattoir workers using serology, occupational and medical questionnaires and examination of plant personnel records. Serological testing on live animals before slaughter and industrial hygiene and ventilation surveys.	400	Longitudinal morbidity survey of incidence of brucellosis.	Exploratory research to evaluate mode of transmission and method for control.

Format for Criteria Document

Preface (To be incorporated by NIOSH after document development).
Acknowledgements (To be incorporated by NIOSH after document development).
Review Committees (To be incorporated by NIOSH after document preparation).
Table of Contents (Include all major components).
I. RECOMMENDATIONS FOR A(N) _____ Standard

Section 1—*Environmental*
- (a) Workplace air concentration.
- (b) Sampling and analysis (procedures described in appendices).

Section 2—*Medical* (includes biologic monitoring and medical examinations)
- (a) Biologic monitoring.
  - (1) Body fluids level limits, or action levels.
  - (2) Expired air limit.
  - (3) Requirements for biological sampling and analytical and calibration methods (procedures described in appendices).
- (b) Medical examinations.
  - (1) Physical examinations: preplacement, periodic, and termination (as applicable).
  - (2) Laboratory examinations: preplacement and periodic.
  - (3) Medical records: access and retention.

Section 3—*Labeling (Posting)*
In accordance with the proposed NIOSH Health Hazard Warning System

Section 4—*Personal Protective Equipment and Clothing*
List the types of respirators and other protective equipment and clothing necessary for the safe performance of the work. List the exposure levels and work conditions under which each is to be used, and the maintenance necessary for its effectiveness. Describe the minimal or occasional exposure for which the wearing of protective equipment or clothing may not be necessary.

Section 5—*Informing the Employee of Hazards from* _____.
Include methods by which the employer would be required to inform the employee of the hazard to which he is exposed and the precautions to be taken by the employer and the employee.

Section 6—*Work Practices and/or Control Procedures*
Include here requirements of a special nature that will have a significant impact on controlling the hazard, such as:
- (a) Handling of the material.
- (b) Waste disposal.
- (c) Work area cleanup, including emergency procedures and equipment.
- (d) Access of nonworkers to work area.
- (e) Exhaust and ventilation requirements.
- (f) Changes in work regime, including decontamination procedures.

Section 7—*Sanitation Practices*
Includes housekeeping, workroom, locker room, and personal hygiene requirements (as applicable).

Section 8—*Environmental Monitoring and Recordkeeping Requirements*
Basic monitoring and recordkeeping; to include the frequency of monitoring and record retention requirements.

II. INTRODUCTION

A brief statement presenting the purpose of the document and NIOSH responsibility under the Occupational Safety and Health Act of 1970.

III. PROPERTIES, SOURCES, AND USES

Include amounts used, produced, or found in the United States; list industries (by type) where found; list occupations in which exposure may occur; cite the industrial processes and chemical reactions involved; give estimate of U.S. employees exposed; list all compounds known which would be included under the proposed standard along with known physical properties such as boiling point, melting point, flash point, molecular weight, vapor pressure, vapor density, specific gravity and solubility in representative common solvents, e.g., water, acetone, benzene, carbon tetrachloride, etc.

IV. BIOLOGICAL EFFECTS OF EXPOSURE

Paragraph identifying the substance (followed by a consideration of all elements below).

—Extent of exposure/hazard
—Historical reports
—Effects on humans
—Epidemiological studies
—Animal toxicity (if applicable, directly or by extrapolation or analogy to human exposure).

Include under the above, all reported toxic effects. A toxic effect is defined as any bodily injury—reversible or irreversible; any tumor, benign or malignant; any mutagenic or teratogenic effect; irritation; a lessening of mental alertness or motivation; or death which has been reported to have resulted from exposure to a chemical substance via the respiratory tract, skin, eye, mouth, or by any other route characteristic of an occupational exposure. Include combined effects resulting from exposure to potentiating agents commonly found in the workplace with the substance which is the subject of this document.

Correlation of Exposure and Effect

V. ENVIRONMENTAL DATA

A. Comprehensive and exhaustive discussion of sampling and analytical methods, including as a minimum: physical quantities to be measured; type and size of sample required and length of time sample is stable; range and sensitivity; precision and accuracy; degree of difficulty; interferences; controllable and uncontrollable errors; error sensitive steps; time required for one analysis and for a series of analyses compare with other methods; include a discussion of advantages and disadvantages. Provide reported modifications which may lead to an improved method. Is this method adaptable to large scale sampling and analysis? As it concerns biologic sampling, does it impose undue burden or discomfort on the worker (i.e., venipuncture)?

B. Discussion of engineering controls to limit exposure and air concentration levels achieved (where feasible, environmental levels encountered may be included here).

VI. DEVELOPMENT OF STANDARD

A. Basis for previous standards (including a brief discussion of foreign and state standards).

B. Basis for recommended environmental standard and biological monitoring. The basis shall include the rationale for accepting the data selected and rejecting potentially acceptable data not selected for the establishment of a standard.

VII. WORK PRACTICES (Discussion of methods proposed in the work practices section, ch. I)

Include when unusual factors prevail requiring a discussion.

VIII. COMPATIBILITY WITH OTHER STANDARDS (When such standards exist)

Include discussion of basis for similar and disparate standards.

IX. REFERENCES:

X. APPENDIX I. Sampling and Calibration Methods. Environmental and Biological

XI. APPENDIX II. Analytical Methods: Environmental and Biological

XII. APPENDIX III. Control Specifications

XIII. APPENDIX IV. Material Safety Data Sheet

XIV. APPENDIX V. Definition of Terms and Abbreviations
If only a short glossary is needed, it may be included at the beginning of the document

XV. TABLES AND FIGURES

Hazards for Development of Criteria Documents, FY 72, 73, and 74

NOTE: Hazards listed do not compare precisely with the order of the *Priority List for Criteria Development for Toxic Substances and Physical Agents* effective January 1, 1972, since research gaps may defer completion until fiscal year 75 and beyond.

Hazards	Estimated pop. at risk	Status of criteria documents
2-Acetylaminofluorene is an organic crystalline substance and a potent bladder carcinogen.	<100	Included in a use-permit system for carcinogens transmitted to DOL July 14, 1972.
Acrolein is a colorless liquid with a pungent odor. The principal uses of acrolein are in organic syntheses, such as the manufacture of synthetic perfumes, of allyl alcohol, and of certain commercial plastics. It is also a byproduct in the decomposition of animal fat. Acrolein enters the body as vapor through the lungs and mucous membranes. Symptoms resulting from exposure include irritation of the eyes and air passages and bronchial inflammation. The annual production estimate is 55 million pounds.	100, 000	Being evaluated for information sufficient to prepare draft criteria document.
Alpha-naphthylamine is a white crystalline solid used in the manufacture of dyes and dye intermediates and is used in making some rubber antioxidants. Along with beta-naphthylamine, it has been linked with bladder cancer.	1, 000	Included in a use-permit system for carinogens transmitted to DOL July 14, 1972.
4-Aminodiphenyl is a colorless crystalline substance used in resin manufacturing as well as in making rubber. It has been shown to cause bladder cancer.	1, 000	Included in a use-permit system for carcinogens transmitted to DOL July 14, 1972.
Ammonia is a colorless gas with a pungent odor and alkaline taste used extensively in laundries, refrigeration, petroleum refining, and in the manufacture of fertilizers, nitric acid, explosives, dyes, plastics, and other chemicals. Ammonia is an irritating gas, especially to the upper respiratory tract. Inhalation of small concentrations will cause severe eye and nasal irritation. Higher concentrations may produce ulceration of the mucous membranes of the mouth and respiratory tract as well as of the cornea of the eyes. Estimated production is 12,083 tons per year.	500, 000	Contract or agreement for draft criteria document in preparation.

Hazards for Development of Criteria Documents, FY 72, 73, and 74—Continued

Hazards	Estimated pop. at risk	Status of criteria documents
Arsenic is a steel-gray brittle metal. It is used in the manufacture of alloys, ceramics, herbicides and insecticides and occurs as a byproduct from metal smelting. It may cause damage through inhalation, ingestion and skin contact. Resulting involvement includes kidney and brain damage, bronchitis, destruction of red blood cells, nervous system disorders, and skin lesions.	1, 500, 000	Second draft being reviewed externally.
Asbestos is a generic name for a variety of different minerals which are silicates of variable composition. Their chief characteristic is a structure composed of long, parallel flexible fibers. Asbestos is used in fireproof fabrics, roofing compositions, electrical and heat insulation, brake linings, etc. Long continued inhalation may result in a form of pneumoconiosis called asbestosis. Recent studies indicate a definite relationship between inhalation of asbestos and cancer. Annual utilization of asbestos is estimated at 758,000 tons.	200, 000	Criteria document transmitted to DOL on Feb. 4, 1972.
Benzene is a highly volatile organic solvent used in drum and tank car quantities in making rubber and in chemical synthesis. Inhalation and skin absorption produce acute effects of drowsiness, loss of consciousness and convulsions and chronic effects of bone marrow depression and acute and chronic leukemia. Approximately 1,100 million gallons are produced yearly.	2, 000, 000	Final draft in preparation.
Benzidine and its salts have a grayish-white or reddish gray appearance. The principal uses are in dye manufacturing and as a stiffening agent in rubber. It is a potent bladder carcinogen.	1, 500	Included in a use-permit system for carcinogens transmitted to DOL July 14, 1972.
Beryllium is a lightweight metal used, along with its alloys, in a variety of aerospace and nuclear applications, and in the manufacture of nonsparking tools. Beryllium compounds are used in electronics, specialized plastics, and intermetallic compounds. Beryllium and its compounds can cause a chronic fibrotic lung disease which is often fatal and a variety of skin diseases. Estimated annual production of beryllium is 250 tons.	28, 000	Criteria document transmitted to DOL on June 30, 1972.

Hazards for Development of Criteria Documents, FY 72, 73, and 74—Continued

Hazards	Estimated pop. at risk	Status of criteria documents
Beta-naphthylamine is a white or reddish intermediate solid used in dye manufacturing. It is notorious for causing bladder cancer.	<100	Included in a use-permit system for carcinogens transmitted to DOL July 14, 1972.
Beta-propiolactone is a colorless liquid with a pungent odor. It has a wide variety of uses in organic synthesis. It is used as a viricidal agent in plasma and tissue grafts. Beta-propiolactone is a skin irritant and a known animal carcinogen.	2, 500	do
Bis(chloromethyl)ether is generated as an unwanted by-product in production of ion exchange resins. It is highly noxious and an irritant to skin, eyes and mucous membranes. It is suspected to be a potent lung carcinogen.	1, 000	do
Cadmium is a soft blue-white, malleable metal or gray-white powder used in manufacturing of batteries and power transmission lines. Exposure to cadmium oxide fumes or dust produces effects ranging from slight throat irritation to extreme difficulty in breathing and severe chest pain followed by prostration and death from pulmonary edema. An estimated 4,732 tons of cadmium are produced annually.	100, 000	Second draft, for external review in preparation.
Carbaryl is an organic pesticide. Chronic exposures cause systemic poisoning due to breakdown of the enzyme cholinesterase. Production is estimated at 55,000,000 pounds.	100, 000	Being evaluated for information sufficient to prepare draft criteria document.
Carbon monoxide is a colorless, odorless, tasteless gas. It is found in internal combustion engine exhaust, combustion gases from heaters, and as a byproduct of many chemical processes. It is used in metallurgy and chemical processes. Carbon monoxide poisoning occurs only by inhalation. Exposure to excessive amounts may cause one or more of the following symptoms: headache, weakness, dizziness, nausea, vomiting, slowing of pulse, and death.	2, 000, 000	Criteria document transmitted to DOL on June 30, 1972.

Hazards for Development of Criteria Documents, FY 72, 73, and 74—Continued

Hazards	Estimated pop. at risk	Status of criteria documents
Carbon tetrachloride is a colorless and highly volatile liquid, used widely as a solvent due to low cost and easy availability. Carbon tetrachloride vapor is readily absorbed by the mucous membranes and lungs. It has a powerful anesthetic effect. Damage to the liver, heart, and kidneys may result from chronic exposure. Exposures to high concentrations may cause unconsciousness and death. Production estimate is 877,000,000 pounds.	160,000	Contract or agreement for draft criteria document in preparation.
Chloroform is a clear, colorless, volatile liquid. Chloroform is most used as a constituent in solvent mixtures. Exposure to high concentrations of chloroform results in narcosis and anesthesia. Production of chloroform totals 220,000,000 pounds.	75,000	do
Chloromethyl methyl ether is a colorless, highly volatile liquid used by chemical companies in reaction technology to add methyl groups to other compounds. Exposure results in severe skin and eye irritation and is suspected of producing lung cancer in animals.	1,000	Included in a use-permit system for carcinogens transmitted to DOL July 14, 1972.
Chromic acid is an aqueous solution of chromium trioxide used in chromium plating, metal cleaning and engraving. Inhalation of chromic acid mist or chromium trioxide dust may cause inflammation of the mucous membranes and ulceration or perforation of the nasal septum. It is a suspected carcinogen. Approximately 25,000 tons are produced annually.	15,000	Second draft being reviewed externally.
Chromium, hexavalent, is a class of chromate compounds from which chromic acid has been arbitrarily excluded for convenience in developing a criteria document. These compounds are produced in the processing of chromium ore and are used in the manufacture of paint pigments, in leather tanning, and in anodizing. Dusts and aqueous solutions are irritating to the skin and respiratory tract, and frequently produce allergic dermatitis. Hexavalent chromium compounds are suspected of causing lung cancer.	75,000	Contract or agreement for draft criteria document in preparation.

Hazards for Development of Criteria Documents, FY 72, 73, and 74—Continued

Hazards	Estimated pop. at risk	Status of criteria documents
Cold stress results from protracted exposure to low temperatures. Meat packers and refrigeration workers as well as outdoor workers are the primary occupations at risk. Frost bite, impaired reaction time, and joint damage are likely results depending upon exposure duration.	1, 000, 000	First draft, for internal review, in preparation.
Cotton dust results from handling or processing cotton fibers. The airborne dust consists of particles ranging in size from less than 0.2 micrometer up to 1½ inches. Long-term exposure may result in a chronic lung disease known as byssinosis.	230, 000	Being evaluated for information sufficient to prepare draft criteria document
3,3′ dichlorobenzidine is a chlorinated derivative of benzidine and is a gray to purple crystalline solid. It is used as an additive in urethane resins and in dye manufacturing. Animal exposure has resulted in bladder cancer.	2, 500	Included in a use-permit system for carcinogens transmitted to DOL July 14, 1972.
Dieldrin is a chlorinated pesticide. It is highly toxic and affects the central nervous system, sometimes fatally. Annual production is about 1,000,000 pounds.	20, 000	Being evaluated for information sufficient to prepare draft criteria document.
4-Dimethylaminoazobenzene is a yellow crystalline solid primarily used as a laboratory indicator and as a dye intermediate. Chronic exposure may cause liver cancer.	1, 000	Included in a use-permit system for carcinogens transmitted to DOL July 14, 1972.
Egress from high structures. This safety criteria will be relevant for such equipment or structures as overhead cranes, large power presses, machine tools, high refinery structures, and storage tanks, and for construction. The hazardous conditions which these criteria will cover include sudden power failures, fires or explosion leading to blocking or destruction of existing stairways.	70, 000	Contract or agreement for draft criteria document in preparation.
Ethyleneimine is a clear colorless liquid, used as an industrial alkylating agent. It is intensely irritating and causes sensitization of the skin. It is also a suspected animal carcinogen.	1, 000	Included in a use-permit system for carcinogens transmitted to DOL July 14, 1972.

Hazards for Development of Criteria Documents, FY 72, 73, and 74—Continued

Hazards	Estimated pop. at risk	Status of criteria documents
Fibrous glass is a manufactured fiber, which has many and varied uses including insulation, decorative fabrics, reinforced plastic building materials, etc. It is widely used in the building trades. Fibrous glass can cause considerable skin irritation.	200, 000	Second draft being reviewed externally.
Fluorides are fluorine containing compounds. They are used in aluminum production and welding and occur in the manufacture of phosphate fertilizers. Fluorides are highly irritating to the respiratory system and skin, and can cause bone lesions.	350, 000	Contract or agreements for draft criteria document in preparation.
Hot environments are found in a variety of work settings, from outdoor work in the summertime to work in a foundry. Hot environments affect the equilibrium of the body. Excessive heat stress may result in a strain on the heart and circulatory system. Continued heat stress will cause heat cramps, heat exhaustion, heat stroke, and even death.	1, 300, 000	Criteria document transmitted to DOL June 30, 1972.
Industrial X-ray is a high frequency ionizing radiation imperceptible by the senses. The principal use is testing for structural defects. X-rays may cause radiation sickness, leukemia, or other types of cancer.	10, 000	Being evaluated for information sufficient to prepare draft criteria document.
Laser (infrared) is a columnated, highly intense, amplified beam of light in the low-frequency range. It is used for precision measurement and is also used in medicine. Damage to the retina of the eye may be caused by exposure.	10, 000	do
Laser (ultraviolet)—similar to other lasers, but of higher frequency.	20, 000	do
Lead (inorganic) is a soft gray metal frequently alloyed with antimony and tin. It is also used industrially in the oxide form. It is used in making storage batteries, cables, ammunition and paints. It is also used in plumbing, construction, and printing. Continued exposure may affect blood cells and cause central nervous system impairment.	83, 000	Criteria document transmitted to DOL Jan. 5, 1973.

Hazards for Development of Criteria Documents, FY 72, 73, and 74—Continued

Hazards	Estimated pop. at risk	Status of criteria documents
Malathion is a yellow liquid considered to be the widest spectrum organophosphate insecticide available for fruits, vegetables and ornamental plants. It is moderately toxic by ingestion and inhalation and is absorbed by the skin. It is a cholinesterase inhibitor. Annual production is 30,000,000 pounds.	75,000	Being evaluated for information sufficient to prepare draft criteria document.
Mechanical power presses—protective devices. There are an estimated 300,000 mechanical power presses now in use in approximately twenty industries including automotive, aircraft, electronic, pharmaceutical, and toy.	500,000	Contract or agreement for draft criteria document in preparation.
Mercury is a silvery metallic element which is a liquid at room temperature. Mercury has many uses including mercury vapor lamps, thermometers, medicine, and amalgams. Mercury is a general protoplasmic poison. The chief effect is on the central nervous system. 3 million pounds of mercury are consumed annually.	150,000	Final draft in preparation.
Methylene chloride is a volatile organic liquid used as a general laboratory solvent, as a medium for extracting chemicals from organic mixtures, and as a fumigant. Inhalation causes intoxication and repeated contact with the skin may result in dermatitis. Annual production is estimated at 418,000,000 pounds.	70,000	Contract delay—completion fiscal year 1975.
4, 4-Methylene-bis (2-Chloroaniline) is a yellow to light gray-tan solid and is a curing agent for isocyanate-containing resins widely used in the plastics industry. This substance has been discovered to produce liver tumors in animals.	25,000	Included in a use-permit system for carcinogens transmitted to DOL July 14, 1972.
4-Nitrodiphenyl is a yellowish or reddish crystalline solid. It is used as a plasticizer, fungicide for textiles, and as a dye intermediate. It is strongly suspected to be a bladder carcinogen.	1,000	Included in a use-permit system for carcinogens transmitted to DOL July 14, 1972.
N-Nitrosodimethylamine is a yellow liquid used principally in the production of 1,1-dimethylhydrazine. It is readily absorbed by the gastrointestinal tract and lungs but skin absorption is slow. It is highly carcinogenic in animals.	100	do

Hazards for Development of Criteria Documents, FY 72, 73, and 74—Continued

Hazards	Estimated pop. at risk	Status of criteria documents
Nitric oxide is a colorless gas occurring in the combustion products of internal combustion engines. It may also be found around nitric acid plants and metal etching industries. Nitric oxide is a respiratory irritant and may be fatal if exposure is severe.	350, 000	Contract or agreement for draft criteria document in preparation.
Nitrogen dioxide is a reddish brown gas. It is a byproduct of many operations and results wherever nitric acid acts upon metals. It is very irritating to eyes and mucous membranes. High concentrations produce immediate coughing and chest pain. Inhalation may cause serious pulmonary edema and produce death within 24 hours.	350, 000	Contract or agreement for draft criteria document in preparation.
Noise is encountered in many different work situations. Noise may be continuous, intermittent, or impact. Occupational hearing loss from noise is dependent on the sound pressure level (dB), the pitch, and the duration of exposure to the noise. Either temporary or permanent loss of hearing may result from exposure to noise. In addition, noise may cause uneasiness, headache, tenseness and dizziness which in turn may contribute to unsafe working conditions.	7, 500, 000	Criteria document transmitted to DOL on June 30, 1972.
Parathion is a brown or yellowish liquid belonging to the class of organophosphorus insecticides. It is one of the best known and extensively used broad spectrum insecticides. It is a highly toxic substance which acts on the central nervous system by interference with normal nerve impulses. Annual production is 60,000,000 pounds.	250, 000	Second draft, for external review, in preparation.
Polychlorinated biphenyls (PCB's) are a group of chlorinated hydrocarbons used as insulating material in electrical equipment. PCB's are irritating to the skin. Estimated annual production is 20 tons.	10, 000	Being evaluated for information sufficient to prepare draft criteria document.
Selenium is a metalloid of the sulfur group. It is used in the manufacture of pigments, insecticides, in rubber compounding, and in the manufacture of rectifiers and photoelectric cells. It is found widely in nature with about 1,000,000 pounds produced annually as a byproduct of refining processes. Selenium may cause dermatitis and nose, throat, eye, and gastrointestinal tract irritation.	3, 300	do

Hazards for Development of Criteria Documents, FY 72, 73, and 74—Continued

Hazards	Estimated pop. at risk	Status of criteria documents
Silica is the common name given to silicon dioxide which is a mineral found widely in nature as sand, quartz, and flint. Its major occurrence in industry is around rock quarries, glass manufacturers, and foundries. Chronic exposure to silica may result in a chronic debilitating, fibrotic condition of the lungs known as silicosis.	1,200,000	First draft being reviewed internally.
Sodium hydroxide is a whitish or gray-white solid made chiefly from the electrolysis of brine. Its chief uses are in the manufacture of rayon, mercerized cotton, soap, paper, explosives, dyestuffs, metal cleaning, oxide coatings, laundering, bleaching, and dish washing. Concentrated solutions are extremely caustic and cause ulceration and burns. Inhalation effects vary from irritation of mucous membranes to severe irritation of lung tissue. An estimated 10,000,000 tons are produced annually.	150,000	Contract delay—completion fiscal year 1975.
Sulfur dioxide is a colorless nonflammable gas with a strong penetrating odor. It is usually an undesired byproduct of smelting, paper manufacturing and combustion of sulfur bearing coals and petroleum fuels. It has an irritating effect upon the mucous membranes of the respiratory tract and the eyes.	500,000	Second draft being reviewed externally.
Sulfuric acid is a liquid ranging in color from clear to brown. When heated, gives off dense and intensely irritating fumes. It is used in great quantities in electroplating, fertilizer manufacture, chemical manufacture, petroleum refining, production of rayon film, iron, and steel. The mist is strongly irritating to the conjunctiva and mucous membranes. Contact may produce severe burns and skin ulceration.	200,000	do
Tetraethyl lead is a volatile liquid used as an antiknock gasoline additive. It is quite toxic to the central nervous system.	35,000	First draft, for internal review, in preparation.
Tetramethyl lead is a colorless liquid used as a gasoline additive. Industrial lead poisoning may occur through inhalation or ingestion of vapors.	35,000	do

Hazards for Development of Criteria Documents, FY 72, 73, and 74—Continued

Hazards	Estimated pop. at risk	Status of criteria documents
Toluene is a colorless volatile, flammable liquid with a benzene-like odor. It is used as a solvent, a component of chemical synthesis and as a thinner for paints, varnishes, enamels and lacquers. Inhalation of toluene vapor is the primary method of absorption. Extreme fatigue, mental confusion, exhilaration, nausea, headache and dizziness may result from overexposure. Estimated annual production is 630,000,000 gallons.	100, 000	Second draft being reviewed externally.
Trichloroethylene is a colorless, liquid solvent used widely in metal degreasing and extraction processes. The predominating physiological response to exposure is central nervous system depression. A number of chronic effects have been attributed to trichloroethylene exposure, such as liver damage, neuritis, and neurotic symptoms. Production and importation total approximately 600,000,000 pounds.	200, 000	do
Ultraviolet is a nonionizing form of electromagnetic radiation invisible to the unaided eye but usually accompanied by intense visible violet light. It is found in arc welding, carbon arc welding, and photoengraving. It may cause conjunctivitis and skin cancer.	320, 000 (industry) 4, 800, 000 (outdoors)	Criteria document transmitted to DOL December 20, 1972. Recommended standard for coal mines in preparation.

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COLLECTIVE BARGAINING

COLLECTIVE BARGAINING FOR OCCUPATIONAL HEALTH AND SAFETY

1. INTRODUCTION

Labor unions in California and throughout the country have recently begun to introduce a variety of new health and safety proposals in collective bargaining negotiations. There are many reasons for the renewed union interest (which are not discussed in this report) -- and there are now some surveys of what is being proposed and negotiated (conducted by federal and state labor departments, and by the labor relations reporting services).

In the private sector, there is no question about the legality of bargaining demands concerning occupational health and safety -- which is a "mandatory" subject of collective bargaining -- i.e., it is the legal obligation of the employer to bargain "in good faith" about health and safety demands or proposals presented by the union. However, the passage of both federal and state legislation has probably tended to reinforce traditional employer inclinations to regard occupational health and safety as a management prerogative. Labor relations law may require bargaining "in good faith," but it does not require the employer to agree with the union proposals.

In the public sector, even though employees are required to perform nearly all kinds of work performed in the private sector, developments in collective bargaining lag as usual. Not only are bargaining relationships still developing between employers and employees and their representatives, but it is still not clear how occupational health and safety legislation applies to public employees. In the case of federal employees, the protections of the Occupational Health and Safety Act of 1970 have been carried over by Executive Order, but the lines of federal departmental responsibility for delivering the promosed protection are still being worked out -- 2 1/2 years after the effective date of OSHA. In the case of state, county, and local government employees in California, protection has been promised by the passage in October of the state's OSHA. But the administrative machinery to deliver the promised protection has yet to be organized -- for either the private or the public sectors. Federal precedents do not suggest that the necessary administrative machinery will be expeditiously developed for public sector employees in California.

In spite of continuing uncertainties about both the federal and the state occupational health and safety laws -- and particularly about their implications for public sector bargaining -- the scope for collective bargaining has been enormously broadened since the passage of the federal OSHA in 1970. The following outline suggests some of the areas of collective bargaining concern which private sector unions have developed since 1970 (it should be obvious that for most unions, this outline suggests the scope of negotiating <u>proposals</u>, and not necessarily the scope of negotiated <u>settlements</u>).

Areas of union interest in supplementing legislated health and safety protection:

1. Formation of joint health and safety committees (or revival of defunct committees), giving them fixed responsibilities for improving health and safety in the plant, and providing an equal voice for union representatives in all functions.

2. Providing for the individual's right to refuse work for health and safety reasons without discrimination; providing for the group's right to strike when the union determines that dangerous or unhealthy conditions of work exist; protecting workers who file health or safety complaints from any kind of discrimination on the job.

3. Incorporating federal and state health and safety standards in the collective bargaining contract by reference, in order to make violations of the standards subject to correction in the grievance and arbitration provisions of the contract.

4. Guaranteeing paid time for workers for time spent in walkarounds, and in connection with any other health and safety inspection or enforcement activities taking place in the plant or workplace (such as time spent investigating health and safety grievances, or on special investigations of on-job accidents, injuries, or illnesses).

5. Guaranteeing that the employer will provide for adequate access to the workplace. In the case of any meeting of a joint committee, or any inspection of a plant or workplace, or any sampling or monitoring procedure, or any special occupational health survey, or any procedures involving physical examination of workers, the contract should guarantee that industrial hygienists or other occupational health professionals who are advisors or consultants to the union shall have access both to the workplace, and any data furnished by the employer or developed in the workplace.

6. Guaranteeing that the employer will provide adequate protective equipment, devices and clothing, but recognizing that such protections are temporary measures for relief of conditions which must be subject to further corrective measures through engineering changes or elimination of the hazard involved.

7. Guaranteeing the confidentiality of the employee's physical exam data, and establishing employment protection or income maintenance or special early retirement guarantees for employees who are found to have reduced physical capacity (job-related).

8. Establishing continuing employer funding for

   a. industrial hygiene or research surveys (including monitoring and sampling programs) which investigate potential health and safety hazards in the workplace and institute control procedures,

   b. education programs on health and safety, for workers; including special training programs for workers doing new jobs or using new equipment or working with new processes or materials,

   c. special programs for special problems, which may overlap into non-occupational causes, such as alcoholism, mental health, drug addiction, etc.,

   d. participation of union representatives in community programs concerned with the overlap between the work environment and the community environment.

9. Guaranteeing access on the part of the health and safety committee, or the union, or both, to meetings, documents, data, reports and information generated by OSHA requirements, federal and state, such as

   a. access to opening and closing OSHA inspection conferences with the employer,

   b. access to copies of the OSHA inspection report, and any data included in it (i.e., air or dust samplings, noise recordings, etc.),

   c. notice of all OSHA citations and penalties and abatement periods, and of all contests and/or appeals taken by the employer,

   d. notice of any employer requests for variances, or for hearings or appeals on such requests (especially important with respect to the California OSH Act),

   e. copies of employer reports required by the Department of Labor, specifically, Forms 101, 102, and 103; and copies of any other records of accidents, injuries or illnesses kept by the company,

   f. access to all data identifying potentially harmful agents (especially chemicals) or materials or work processes.

The following contract clauses (and proposals) indicate the nature of several unique approaches to health and safety which have been undertaken by various unions.

2. Examples of negotiated approaches to a variety of health and safety problems.

(1) UNITED AUTO WORKERS AND CHRYSLER CORPORATION: SEPTEMBER 1973 COLLECTIVE BARGAINING AGREEMENT

(A) Summary

The UAW will for the first time have a special health and safety representative in each plant available to deal with special problems, to conduct weekly plant inspections and to meet subsequently, each week, with plant management. These representatives will be given special training in safety and health matters by the UAW.

UAW safety and health staff members will have access to plants for inspection and receive, on request, all data available as to any known harmful material to which employees may be exposed.

Chrysler is required to provide testing and protective equipment and training programs for all workers, as well as medical examinations and appropriate tests.

The UAW retains the right to strike when the Union determines that dangerous or unhealthy conditions of work exist.

To help administer the new program, joint management-union committees will be established at both the local and international union levels.

(B) Specific provisions

UAW and Chrysler recognize a mutual obligation to secure the physical well being of UAW-Chrysler employees by working toward the prevention, correction and elimination of all hazardous conditions.

The Corporation will provide sampling and monitoring equipment to the local committees for measuring noise, carbon monoxide and air flow.

The Corporation will provide protective equipment, devices and clothing without cost to employees.

The Corporation will provide training programs in cooperation with the UAW at two levels: a) for specialized plant personnel, and b) for all workers.

The Corporation will disclose the identity of any potentially harmful physical agents or toxic materials to which workers are exposed -- also symptoms, medical remedies and antidotes at the request of the International Committee.

The Corporation agrees to provide and maintain adequate and competent staff and medical facilities and to provide without cost to worker medical services, physical examinations and other tests at a frequency and extent necessary to determine whether health of workers is being adversely affected by exposure to physically harmful agents or toxic materials.

The Corporation will provide to each worker or his personal physician, upon request of worker, a complete and accurate report of any such medical examinations or tests as related to an occupational hazard.

The Corporation industrial safety and health staff will make regular surveys of each of its plants as well as special surveys upon request of either plant management or the UAW. Findings of these surveys will be reported to the International Union upon request.

The International Union safety and health staff representatives shall, with proper advance notice, have access to all plants and locations where members of the UAW are employed for purposes of making safety and health inspections.

The Corporation shall furnish to the UAW a comprehensive report for each of its plants of the same data now required to compile on OSHA Forms 102 and 103.

The Corporation and the UAW agree to designate two representatives at the International level who shall constitute an International safety and health committee, meet at least quarterly, review general policy direction and implement and promote an effective company-wide safety and health program.

The Corporation and the UAW agree that at the plant level there shall be a joint UAW-Chrysler safety and health committee which shall meet at least once a month with one representative from management and one from the Union. Regular weekly inspections will be conducted in the plant, special problems will be reviewed, recommendations for changes will be made.

UAW representatives shall be notified in advance of inspections by government officials and shall be permitted to accompany these officials on their inspections; time spent by Union representatives in conjunction with work of the plant committee shall be compensated by the Corporation.

The procedures established in the safety and health program shall not preclude the right of any employee to file a grievance at Step 1 of the grievance procedure. The primary responsibility of resolving differences involving health and safety matters remains with the plant supervision and the UAW local union representative.

The Union retains the right to strike when it determines that dangerous or unhealthy conditions of work exist in a plant.

(C) Additional provisions:

With respect to the regular weekly inspections which are required at local plant levels, the Company agreed that each Thursday union stewards and/or committeemen will tour the plants with Chrysler representatives, and each Friday the chairman of the in-plant safety committee will review the general conditions found the preceding day.

The health and safety of foundry workers will be the subject of an intensive study to determine whether there are differences between the mortality and morbidity patterns of Chrysler foundry and non-foundry workers. The study will begin January 1, 1974, and be completed June 30, 1975. If the investigation finds higher mortality rates for the foundry workers, the company will increase the service credited to all UAW Chrysler workers with 25 years of service by 20 percent.

A research study will also be conducted into death rates and occupational hazards involving forge workers and workers exposed to asbestos, with a possibility of reopening the pension plan. The study is scheduled to begin July 1, 1974, and to be completed by June 30, 1976. It will seek to determine whether long service in forge plants and protracted exposure to asbestos in the manufacturing process have caused increased mortality

and morbidity. If so, the pension plan may be reopened in September, 1976.

An extraordinary provision in the contract would require Chrysler to pay the full cost of any tax levied on the worker to finance a national health insurance program. (For example, under the Kennedy health security proposal, the employer would contribute 3 1/2 per cent of a worker's earnings, and the employee would contribute 1 per cent, up to a maximum of $150 a year. But under the UAW Chrysler agreement, the Company would pay the full 4 1/2 per cent.)

(2) UNITED FARMWORKERS UNION AND DELANO AREA GRAPE GROWERS

(A) Background:

Effective protection for farmworkers from pesticide poisoning has not been forthcoming either from the EPA or from OSHA. Both agencies have held hearings throughout the country on proposed regulations of pesticide applications and re-entry intervals. A great deal of testimony has been entered into the hearing records of both agencies about the undue economic hardships which might be caused to farmers and growers by virtue of the proposed regulations. (The health and safety of farmworkers is supposed to be the sole criterion in setting worker protection standards.) A great deal of controversy has also been generated by the contention of growers that exact data as to the precise extent of pesticide poisonings does not exist. They argue that it is thus impossible for the federal government to set forth equitable standards.

Two facts stand out from the controversy about pesticide standards: that no federal pesticide standard yet exists, 2-1/2 years after the passage of OSHA, and that arguments continue even with respect to the jurisdiction of governmental agencies for enforcement of any standards that might ultimately be recommended and established.

In the meantime, farmworkers continue to confront many health problems caused by pesticides, and those who are covered by contracts negotiated by the United Farmworkers Union have established a remarkable mechanism for worker protection. The following clause is from the United Farmworkers Grape Contract, covering the Delano area, where representation of workers was recently claimed, and subsequently disclaimed by the Teamsters (causing consequent delay in the renewal of this clause, which was last revised 4-1-70). Other UFW contracts contain variations in this basic protection procedure, depending on the nature of the crops involved; however, all UFW clauses contain similarly detailed provisions for reporting all pertinent information about applications of pesticides.

If the continued failure of the government agencies to develop any pesticide standards for farmworkers is in fact due to the absence of data on what is sprayed and when and where and who is affected, the government agencies should undertake to assist the United Farmworkers Union in the enforcement of their health and safety contract clauses, which provide an excellent framework for the development, in the fields, of the needed epidemiological data.

(B) Contract Provisions: SECTION XVIII: HEALTH AND SAFETY:

Company and the United Farmworkers Organizing Committee, AFL-CIO recognize the need to protect and conserve human life, water, soil and vegetation. Economic poisons, when used incorrectly

by a grower in agriculture on any crop, may be harmful to farmworkers and to consumers, disrupt the earth's ecology, and do not properly serve the farmers. In the hope of developing, with the help of Federal, State and University consultants, new imaginative and creative approaches to the problem of conserving our natural resources, and in hope of taking progressive steps to protect the health of farmworkers and consumers, Company and Union agree that the subject of economic poisons is a necessary and desirable subject for this collective bargaining agreement.

Company and Union agree as follows:

A. Union shall cause to be formed a Health and Safety Committee (the "Committee") comprised of workers' representatives. Members of the Committee shall have free access to all records concerning the use of economic poisons. The Committee shall participate in the formulation of rules and practices relating to the health and safety of workers including, but not limited to, the following: use of economic poisons; the use of garments, materials, tools and equipment as they may affect the health and safety of the workers; and sanitation conditions.

B. DDT, ALDRIN, DIELFRIN, ENDRIN, PARATHION, TEPP and other economic poisons which are extremely dangerous to farmworkers, consumers and the environment, shall not be used.

C. The Committee shall approve the use of organo-phosphates. Company will notify Committee at least seven (7) days prior to the application of organo-phosphate material. Such notice shall contain the information set forth in paragraph D, below. The Committee shall determine the length of time during which farmworkers will not be permitted to enter a sprayed field following the application of an organo-phosphate pesticide. One baseline cholinesterase test and other additional tests shall be taken at the expense of Company when organo-phosphates are used. The results of said tests shall be given to Committee immediately, and, if requested, to an authorized Union representative.

D. The following records shall be kept and made available to the Committee and to any other authorized Union representative:

   1. A plan showing the size and location of fields and a list of the crops or plants being grown.

   2. Pesticides and economic poisons used including brand names plus active ingredients, registration number on the label and manufacturer's batch or lot number.

      (a) Dates and time applied or to be applied.
      (b) Location of crops or plants treated or to be treated.
      (c) Amount of each application.

(d) Formula.
(e) Method of application.
(f) Person who applied the pesticide.
(g) Date of Harvest.

E. No worker under this agreement will be required to work when in good faith he believes that to do so would immediately endanger his health or safety.

F. There shall be adequate toilet facilities, separate for men and women in the field readily accessible to workers, that will be maintained in a clean and sanitary manner. These may be portable facilities and shall be maintained at the ratio of one for every forty workers or fraction thereof.

G. Each place where there is work being performed shall be provided with suitable, cool, potable drinking water convenient to workers. Individual paper drinking cups shall be provided.

H. Workers will have two (2) rest periods of ten (10) minutes which insofar as practical shall be in the middle of each work period.

I. Tools and equipment and protective garments necessary to perform the work and/or to safeguard the health or to prevent injury to a worker's person shall be provided, maintained and paid for by Company, such as but not limited to: grape knives, rain gear, gloves, pruning shears, and umbrella for tractor drivers. Workers shall be responsible for turning in all such equipment checked out to them, but shall not be responsible for breakage.

J. Adequate first aid supplies shall be provided and kept in clean and sanitary dust proof containers.

(3) UNITED RUBBER, CORK, LINOLEUM AND PLASTIC WORKERS OF AMERICA

(A) Background:

Rubber workers have long been subject to exposure to chemical fumes (such as carbon disulphide) suspected of causing a wide variety of job-related ailments, but generally unrecognized until the workers were severely damaged. The approach which the union took to a backlog of such problems was negotiation of the Joint Occupational Health Program. The program was launched in 1971 when the URW, and the B.F. Goodrich Co., and the Harvard University School of Public Health signed a contract setting up an occupational research project under a University director. Since then, identical contracts have been signed with seven additional rubber companies, making the research effort industry-wide. Armstrong is also working with Harvard

University, Firestone, Goodyear, General Tire, Uniroyal, and Lee and Kelly Springfield are working with a research team from the University of North Carolina School of Public Health. The contracts cover nearly 82,000 workers in 69 URW locals.

Both labor and management agreed at the beginning of the program that no one really knew what special problems might confront rubber workers. In some cases, employees work with new chemicals and processes that have not yet been tested for possible harmful effects. Other workers encounter substances and levels of exposure that have not been rechecked for years.

The union also objected strenuously to the lack of company-wide medical surveillance systems to detect the problems, to identify where they are occurring, in what plants, departments, or manufacturing processes, and what kinds of illness, disabilities, or causes of death were affecting how many workers over what periods of time.

The researchers are now seeking this kind of information, by surveying plant conditions, talking with and testing workers, and analyzing reams of company and union records. The researchers are documenting the adequacy of safeguards against such known hazards as asbestos and talc, finding out exactly what chemicals and materials are being used in what departments, taking and evaluating air samples, and identifying hazards unrecognized in the past by the company, or the union, or the workers. They are also engaged in long-term epidemiology studies of the death and disease rates of particular workers, as compared to rates of other workers outside the industry. Some of these studies will take time to complete. But according to the Director of Industrial Hygiene of the URW, the researchers who are involved in the plants can also raise questions at any time, and present recommendations for cleaning up operations and practices which appear to be hazardous. The record of improvement in the plants since the research work began has been impressive, according to the Union representatives.

(B) DESCRIPTION OF CONTRACT LANGUAGE ESTABLISHING THE JOINT OCCUPATIONAL HEALTH PROGRAM WITH THE MAJOR RUBBER COMPANIES

The preamble to the contract clauses recognizes that "a useful purpose can be served by an independent industrial health survey of the working environment by a recognized school of public health to determine whether any relationship exists between this environment and occupational illness or disease."

The clauses then establish (a) the Organized Research Study Groups, which have their own Directors (from the Schools of Public Health at Harvard or at University of North Carolina), and (b) the Occupational Health Committees, which are composed of three representatives from the Company and three from the Union (salaries and expenses of the committee members are paid by the respective parties). The Director of the Organized Research Study Group (ORSG) serves as the chief consultant to the Occupational Health Committee (OHC).

The OHC can make recommendations for the implementation of the findings of the ORSG: can review occupational health questions referred to it by local plant Health and Safety Committees, after all local procedures for handling such questions have been exhausted; and can recommend procedures for the early identification and detection of potentially toxic and hazardous agents and their use in the plants.

The ORSG is responsible for formulating and conducting an epidemiological study into potential environmental health problems which might affect employees, and for formulating long-range programs based upon the results of this study. The ORSG also acts as consultant to the OHC on matters referred to that Committee, and assists in the development of appropriate environmental controls of (1) new chemicals and processes introduced into the Company's operations, (2) chemicals and dusts of already recognized toxicity, and (3) other working conditions as appropriate. The ORSG also recommends uniform methods of record keeping to assist in the prevention and detection of environmental diseases. The ORSG makes annual reports to the OHC summarizing work completed and work in progress.

Where existing data and other information available to the ORSG is inadequate for the purposes of carrying out the epidemiological survey, the ORSG has the right to make independent studies at all company locations covered by the agreements. And the companies are required to make available to the ORSG whatever data and information it needs in connection with its surveys, "to the extent legal and contractual obligations permit." There are further limitations in the agreements on the "privileged and confidential" nature of information submitted by the Company to the ORSG and/or the OHC.

The companies are required to make periodic reports to the OHC on what actions it has taken to implement the recommendations of the ORSG or the OHC.

Whenever a potential or actual health hazard is recongized by the OHC, requiring immediate investigation, the Committee requests the Director of the ORSG to designate a qualified expert to determine what data or other information already exists on the hazard, and to recommend what if any additional investigation may be needed.

The activities of the ORSG's and all expenses of the Joint Occupational Health Program are funded by the Company in an amount "not to exceed the equivalent of 1/2 cent per hour for each hour worked by employees covered hereby."

(C) HEALTH AND SAFETY PROVISIONS RECOMMENDED BY URW FOR OTHER CONTRACTS NEGOTIATED BY ITS AFFILIATES:

For smaller plants in their jurisdiction (including many which present undocumented chemical hazards to workers), URW recommends the following kinds of provisions and contract language:

Company obligation and incorporation of standards: "The Company agrees to furnish each employee employment and a place of employment free from all recognized hazards that are causing or are likely to cause physical harm to the employee. The Company further agrees that the General Duty Clause (Section 5) of the Occupational Safety and Health Act of 1970 and all standards promulgated under Section 6 of said Act shall constitute minimum acceptable practice, except where an applicable state standard may exceed Federal standards."

Joint Labor-Management Safety Committee: (3 representatives of management, and 3 to be selected by the local union; the committee should meet at least once a week, and inspect the plant at least twice a month. It should make recommendations for the correction of unsafe or harmful conditions or practices. In this connection, "a designated official of the Company shall be responsible for the enforcement of the joint Labor-Management Safety Committee's recommendations. All such recommendations shall include a target date for abatement of hazardous conditions or practices.")

> "Safety Committee members will be paid average hourly earnings for all lost time when meeting jointly with management and for any inspection or investigation of safety and health problems in the plant."
>
> Among other functions of the Safety Committee, it should, "subject to the grievance procedure of the basic Agreement, negotiate and adjust all disputes arising under the Health and Safety Clause of this contract."

Access to Company Data: "Accident, injury and illness records shall be kept and maintained by the Company and shall be made available upon request to the Union Members of the Joint Safety Committee. These reports shall include all reports required by the Department of Labor under the Occupational Health and Safety Act of 1970, specifically including DOL Forms 101, 102, and 103, or other appropriately designated Forms. The Company also agrees to make available to the Committee upon request an up-to-date list of all compounds and substances used in the plant. This list shall include all chemicals as well as definition or chemical breakdown of trade name descriptions."

Access to Plant: "The Union members of the Committee may seek the counsel and assistance of representatives of the (United Rubber Workers) International Union and such representatives shall be granted the right to accompany the Committee on inspections, attend meetings of the Committee, and make recommendations to the Committee, and shall be permitted to make such investigations and physical examinations as may be reasonably connected with the purposes of the Committee."

Medical services and data: "The Company shall furnish competent medical services and supply adequate facilities for the proper first aid treatment of cases resulting from injury or physical

impairments or afflictions in the plant. Copies of the reports of the medical findings made by the Company's medical service or reports of outside medical services used by the Company shall be furnished to the employee as well as to the Local Union.

Right of employee to refuse work: "No employee or group of employees shall be required to work on a job or machine while its safety is being questioned by the Joint Labor-Management Safety Committee. During such time the employee or group of employees shall receive their regular average hourly earnings."

"No employee shall be required to work on any job in the plant with which he is unfamiliar until he shall have received adequate safety training instructions in the performance of the operation."

Protective Equipment and Clothing: "The Union agrees to make every reasonable effort to have its members observe all safety and health rules promulgated under this agreement and to use all safety and protective equipment furnished for this purpose. It is recognized that protective equipment and clothing are temporary measures for relief of conditions which must be subject to further corrective measures through engineering changes or elimination of the hazard involved."

Reference to Grievance Procedure: "All disputes arising under this article and not resolved by the Committee shall be considered proper subjects for adjustment under the grievance procedure including arbitration as set forth is article _____ of this agreement. Any such grievance filed by the Union shall be introduced at the level immediately preceding arbitration."

(4) OIL, CHEMICAL AND ATOMIC WORKERS, AFL-CIO

(A) Background:

Oil and Chemical workers are subjected to exposures to toxic fumes, vapors, gases, liquids and acids, which can do slow, insidious damage to the human body. Documentation and control of such hazards is often difficult and painstaking work.

Until this year, the managers of the leading oil industry firms were always the sole judges of the healthfulness and safety of work assignments. Early this year, however, OCAW "broke through" in negotiations with eleven major oil companies, by getting their agreement to a clause establishing joint union-management health and safety committees with power to police the work environment conditions in their plants.

The eleven companies included American Oil, Atlantic-Richfield, Gulf, Texaco, Mobil, Exxon, Union, Standard of Ohio, Cities Service, Continental and Phillips. These companies also agreed to the following:

...Employment by the companies of independent industrial health consultants, subject to union approval, to make health surveys in the plants.

...Periodic physical examinations of workers, the scope of which is to be determined by the joint committees.

...Delivery by the companies to the union annually of full statistics on morbidity and mortality of employees, in order to reveal to the health researchers whether there is undue incidence of any particular ailment which might be related to work exposure.

Shell Oil Company negotiations broke down on the same OCAW health and safety proposals, and on the union's industry-wide demand for pension improvements, and a strike and boycott against Shell ensued. Many important environmental groups, including the Sierra Club, joined in support of Shell workers.

Paragraph (b) reproduces the language of the OCAW agreement with American Oil Co., which is similar to the union's agreements with the 10 other major oil firms. (The Shell settlement contained no similar arbitration provision for safety and health issues. The Company agreed to negotiate on such issues during the contract term, but the contract contains a no-strike provision. In addition, while the Shell settlement provides for joint health and safety committees, and for company payment for "appropriate physical exams," there is no provision for outside consultants.)

(B) OCAW/AMERICAN OIL CO. HEALTH AND SAFETY PROVISION:

1. There shall be established a joint labor-management Health and Safety Committee, consisting of equal Union and Company representatives, but not less than two or more than four each.

2. The Company will, from time to time, retain at its expense qualified industrial health consultants, subject to the approval of the International Union President or his designee, to undertake industrial health research surveys, as decided upon by the Committee, to determine if any health hazards exist in the work place.

3. Such research surveys will include measurements of the exposures in the work place, the results of which will be submitted in writing to the Company, the International Union President, and the joint Committee by the research consultant and the results will also relate the findings to existing recognized standards.

4. The Company shall pay for the appropriate physical examination and medical tests at a frequency and extent determined from time to time by the joint Committee.

5. The Union agrees that each research report shall be treated as privileged and confidential to the extent that disclosure of information in the nature of trade secrets will not be made without the prior written approval of the Company.

6. At a mutually established time, subsequent to the receipt of research survey reports, the joint Committee will meet for the purpose of reviewing such reports and to determine whether corrective measures are necessary in light of the industrial consultant's findings and to determine the means of implementing such corrective measures.

7. Within sixty days following the execution of this agreement and on each successive October 1 thereafter, the Company will furnish to the Union all available information on the morbidity and mortality experience of its employees.

8. The joint Committee shall meet as often as necessary, but not less than once each month, at a regularly scheduled time and place, for the purpose of jointly considering, inspecting, investigating and reviewing health and safety conditions and practices and investigating accidents, and for the purpose of jointly and effectively making constructive recommendations with respect thereto, including but not limited to the implementation of corrective measures to eliminate unhealthy and unsafe conditions and practices and to improve existing health and safety conditions and practices. All matters considered and handled by the Committee shall be reduced to writing, and joint minutes of all meetings of the Committee shall be made and maintained, and copies thereof shall be furnished to the International Union President. Time spent in connection with the work of the Committee by Union representatives, including walk-around time spent in relation to inspections and investigations, shall be considered and compensated for as their regularly assigned work.

9. In addition to the foregoing, Company intends to continue its existing industrial hygiene program as administered by company personnel.

10. Any dispute arising with respect to the interpretation or application of the provisions hereof shall be subject to the grievance and arbitration procedures set forth in the Agreement.

(5) UNITED STEELWORKERS OF AMERICA: Recommended health and safety negotiating program:

The United Steelworkers wage and policy committee has recommended the following program (developed by the union's safety and health department) for negotiation in all agreements (contianer, aluminum, nonferrous metal, and basic steel industries).

The safety and health guidelines are as follows:

1. A contractual mechanism should be obtained for prompt resolution of employee claims that jobs are unsafe or hazardous including the right of every employee to refuse to work on a job which he believes to be unsafe or a health hazard without loss of pay until a resolution is obtained.

2. Injured workers should receive make-up pay consisting of the difference between their workmen's compensation benefits and their regular pay.

3. Periodic expert studies should be obtained and contractual guarantees should be secured assuring that the in-plant environment is free of harmful pollutants and noise.

4. Emphasis should be placed on rehabilitation rather than on punishment of dope addiction.

5. Joint safety committees should participate in establishment of safety rules, should be given copies of all accident reports, should have the right to participate jointly in and receive all data obtained from air, noise, hazard or toxicity studies, and should have adequate authority to investigate and correct unsafe and unhealthy conditions.

-- Compiled by Bruce Poyer, Coordinator
Center for Labor Research and Education

PRINCIPLES GOVERNING HEALTH & SAFETY CONTRACT CLAUSES

Local Union bargaining committees are often at a loss for sample contract clauses in the safety and health field because of a scarcity of good contract samples. In the past year or two increased union militancy regarding safety and health issues has resulted in successful negotiating of stronger clauses. The following are principles underlying a few of these.

1. The employer agrees to abide by existing state and federal safety and health rules and regulations.

2. The employer agrees to provide some state amount of medical care, a first aid room, and a stipulated quantity of medical supplies.

3. The union shall set up a safety committee, either jointly with the employer or as an independent body meeting with employer representatives. This committee has the power to red tag unsafe equipment, make periodic plant safety inspections, meet with the employer to discuss and abate unsafe practices and conditions, keep written minutes of meetings, and represent bargaining unit employees on safety and health matters.

4. The union has the right to bring in outside assistance on safety and health matters.

5. The employer shall pay for lost time for safety inspections and OSHA walkarounds of the employee representative or a number of committee members.

6. The employer shall furnish the union with copies of workmens compensation reports, health studies, and other data pertaining to occupational safety and health upon request.

7. The union has the right to handle safety disputes in the regular grievance procedure.

8. The union has the right to take health studies in the plant, either with the employer's hygiene equipment, or with equipment secured by the union, when it has reason to believe a hazard exists.

9. When an employee is unable to perform duties of his job because of an unsafe condition, he shall be provide with alternate employment at regular rate of pay. There usually are restrictions on how the question of "unsafe condition" is to be determined.

10. The employer shall provide periodic medical examinations to employees exposed to occupational disease hazards. The results of the tests shall be made available to the union if the employee agrees to a release of the the information.

11. The employer shall provide training to employees on certain jobs, such as fork lift operation and crane operator, but agrees to provide all employees with training in duties of their jobs which may be hazardous to themselves or others.

12. The company and union shall periodically review lost-time accidents in an attempt to determine injury causes for purposes of reducing accident rates.

13. The employer agrees to discuss hazard abatement periods with the union committee.

14. The union bargaining committee chairman shall sit on the safety committee.

15. The employer shall provide workers and the union with information related to potentially toxic effects of workplace contaminents and hazards.

16. The employer agrees to make engineered changes to machines and equipment as a long-term alternative to continued use of ear protective devices and apparatus for breathing and lung safety.

17. Protective equipment shall be provided at no cost to the employee.

18. The union has the right to strike when it determines that dangerous or unhealthy conditions of work exist in the plant.

November 30, 1973

TYPICAL CONTRACT CLAUSES INVOLVING SAFETY AND HEALTH

Passage of the Occupational Safety and Health Act of 1970 has implications in terms of the labor agreements containing safety and health provisions. The following are fairly typical contract clauses outlining various degrees of union involvement in safety and health. Consider also how effectively the average local union officer is qualified to process a safety and health complaint under each type of provision.

Laws and orders prevail when in conflict with the agreement if the parties mutually agree or "proper authority" decides a conflict exists:

109
Section 2. STATE OR FEDERAL LAWS. It is understood and agreed that any part of this Agreement that may be construed by proper authority or by mutual agreement to be in conflict with any mandatory State or Federal Laws or Executive Order, then such laws or orders shall prevail.

The Company will make "reasonable provisions" for safety and health of its employees in accordance with the laws of . . . Wisconsin."

Section 12. A. The Company shall continue to make reasonable provisions for the safety and health of its employees during the hours of their employment in accordance with the laws of the State of Wisconsin.

The safety committee shall "advise" with Plant Management concerning safety matters:

98
Section 3. SAFETY COMMITTEE MEETINGS AND SAFETY INSPECTION. The safety committee shall hold monthly meetings at times determined by the committee. The function of the safety committee shall be to advise with Plant Management concerning safety matters. In the discharge of its function, the safety committee shall consider existing practices and rules relating to safety, formulate suggested changes in existing practices and rules, and recommend adoption of new practices and rules. Advices of the safety committee, together with supporting suggestions, recommendations and reasons shall be submitted to the Vice President — Personnel.

Company will maintain "proper" sanitary and safety conditions, and Union has representation on the Safety Committee:

> The Company will continue to provide, and with the cooperation of its employees, maintain proper sanitary and safety conditions. The Shop Chairmen of the Union shall be permanent members of the Safety Committee.

Employees have obligation to obey all rules (including safety), but no safety obligation spelled out for Employer:

> Employees are to comply with all rules, as established by the Company.

Joint responsibility for eliminating hazards, and Union obligation to notify Company about unsafe conditions:

> **ARTICLE XIV**
>
> **Safety and Health**
>
> **Section 1.** The Company and the Union will cooperate in continuing objectives to eliminate accidents and health hazards. The Company shall make reasonable provisions for the safety and health of its employees during hours of their employment and will exercise every reasonable effort to improve any unsafe or hazardous conditions existing or arising in its plants whenever such conditions come to its notice.

Employee may refuse to work on hazardous job, and has right to file a safety grievance:

> **Section 2.** An employee who, in good faith, believes that he is required to work under conditions which are unsafe or unhealthy beyond the normal hazard inherent in the operation in question, shall, in addition to his right to file a grievance for immediate handling, also have the right to relief from the job without loss of his right to return thereto, until such time as the matter is settled in the grievance procedure.

Employer's obligation to find substitute work for duration of hazard is expressly limited:

> **Section 3.** Section 2. above notwithstanding, the Company is under no obligation to provide an assignment to work to an employee who exercises his right to relief from the job under the provisions of Section 2. above, unless it is first determined by the Company Safety Director, after consultation with competent professional authorities and the Job Steward, that an unsafe condition does, in fact, exist.

April 21, 1972

CONTRACT CLAUSES COVERING WORKER SAFETY AND HEALTH

Many workers have accepted the notion that accidents are the result of worker carelessness. This may be one of the reasons why most union agreements are weak in the area of safety and health. There are various degrees of contract protection offered workers in labor agreements with regard to worker safety and working conditions which might involve injuries or physical harm. Until passage of OSHA, few of these clauses were enforced with any enthusiasm by workers and unions. Some of the various types of contract clauses found are summarized below, from weakest to strongest:

CONTRACT CLAUSE:

1. The union and its members agree to abide by employer safety rules, with discipline or discharge if the rules are violated. No mention of the employer's obligation to provide a safe and healthful work environment, nor what would happen if the employer violated a safety rule.

2. The employer will make a reasonable provision for a safe place and safe equipment for its employees to work in or on. No mention of what would be done if he failed to live up to the contract clause. The employer's duty is watered down by inclusion of word "reasonable".

3. The employer agrees to abide by existing state and federal laws. No mention of specific safety laws, and no indication of what will happen if the employer violates safety and health regulations. The contract does not specify whether the union must file a grievance or file a complaint with the appropriate government agency.

4. A joint safety committee is set up, and union members may be "encouraged" to "cooperate" with the employer, or "advise" the employer when a hazard is found. However, the employer is not obliged to remedy the hazard in any specific manner, and no mention is made of the grievance procedure as a possible method for speeding up compliance or appealing non-compliance.

5. The employer agrees to provide first-aid facilities to its employees. This merely gives workers something they were already entitled to by most state laws and safety regulations.

6. The agreement states that the joint safety committee is obliged to meet so many times per month, or at some specified time period. They may or may not have the right to conduct inspections during working hours.

7. The employer may be obliged by the contract to offer employees exposed to health hazards periodic checkups or hearing tests, to be paid for by the company. Sometimes these must be done by a physician chosen by the employer, and sometimes it is unclear as to who pays for the examination.

8. The employer is obliged to "supply" protective safety equipment. The contract may be unclear as to the extent of employer's responsibility to pay for same.

9. The union safety committee may have the right to "red tag" unsafe equipment, but no mention is made of what happens to the employee who is displaced by the committee's action.

10. The contract provides that, when unsafe conditions or equipment are called to the employer's attention, he is obliged to make corrections "if economically feasible". This gives the employer the right to make a final determination as to whether corrective actions will be taken.

11. The contract states that periodic health surveys will be undertaken by the parties, and the results made available to the union.

12. The employer is obliged to make copies of OSHA injury and health reports available to the union.

13. The contract provides plant access to international union health and safety representatives.

14. The company must make equipment for measuring noise, carbon monoxide and air flow available to the local union safety committee for their use.

15. The contract provides that the employer pays for lost-time involved in conducting OSHA walkarounds.

16. The employer is obliged to provide training (sometimes certification) to employees assigned to work in jobs which are hazardous to other workers (crane operators and fork lift operators, for example).

17. The employer and union are required to conduct a review of lost-time accidents at their regular meetings to determine injury causation.

18. The company and union take written minutes of meetings and inspection results. The minutes include description of hazards detected, abatement periods agreed-to, and descriptions of lost-time injuries and causation, if such can be determined.

November 7, 1973

1972-73 Agreement between:

BERGSTROM PAPER COMPANY, Neenah, Wisconsin, and
United Paperworkers International Union, Local #889

ARTICLE XXVII
SAFETY

	PURPOSE OF CLAUSE:
Section 27.1 Supervisors are to instruct employees on safety in their line of work. A new employee shall be so instructed before he or she starts their work assignment.	The right to training in work practices.
Section 27.2 All employees are to comply with all safety rules as established by the Company and as set forth in the Company booklet pertaining to safety rules. The Union will assist the Company in all matters of safety.	Union and employee obligation to abide by company safety rules.
Section 27.3 Whenever the union feels this article has been violated, the dispute will be handled through the grievance procedure. Such grievance shall be accompanied by a written complaint, signed by the employee, citing the safety violation on an agreed to complaint form. Any employee forced to temporarily leave his work area to avoid a hazardous working condition shall notify his supervisor immediately.	Right to use the regular grievance procedure for safety complaints.
Section 27.4 The company agrees to furnish the union with a copy of any report filed with the state on industrial accidents. It will be sent to the Chairman of the Union Safety and Health Committee.	Copies of injury reports filed with Workmens' Compensation Division.
Section 27.5 The company agrees to reimburse lost wages of an authorized union representative who may accompany a Federal or State inspector on an inspection of either company plant, if such employee is scheduled to work at the time of the inspection.	Paid lost time for the OSHA walkaround.

401 NORTH MICHIGAN AVENUE • CHICAGO, ILLINOIS 60611

TELEPHONE—AREA CODE 312
527-0200

LABOR RELATIONS DEPARTMENT

Mr. Pat Greathouse, Vice President
International Union, United Automobile
Aerospace and Agricultural Implement
Workers of America
Solidarity House
8000 East Jefferson Avenue
Detroit, Michigan 48214

Letter #19

Dear Mr. Greathouse:

During our contract negotiations the parties devoted considerable time to discussions relative to the means through which the safety and health of all employes could best be protected. As a result of our discussions it was agreed as follows:

Promptly following the ratification of the P&M Main Labor Contract an International Joint Committee on Health and Safety (hereinafter referred to as the International Safety Committee) will be established, consisting of two (2) representatives of the International Union plus one alternate appointed by the Director of the Union's Agricultural Implement Department, and two (2) representatives of the Company plus one alternate appointed by the Vice President of Industrial Relations of the Company, Each party will appoint at least one (1) member who has professional training in industrial hygiene or safety. This Committee shall:

(a) Meet at least quarterly at mutually agreeable times and places.

(b) Review the Company's safety and health programs and make necessary or desirable recommendations.

(c) Develop and recommend to the Company an appropriate training program to be established for Union members of the Local Safety Committees.

(d) Develop and recommend to the Company guidelines for employe training and education.

(e) Review and analyze federal, state, or local standards or regulations which affect the health and safety programs within the Company.

(f) Review problems concerning serious or unusual situations affecting plant health and safety and make necessary or desirable recommendations.

(g) Review and analyze the data for all plants that the Company is now required to compile on OSHA Forms #102 and #103 as they are now constituted.

(h) Receive and deal with matters referred to them by Local Safety Committees.

The Company recognizes its obligation to provide as safe and healthful a working environment for employes as it reasonably can and both parties agree to use their best efforts, jointly, to achieve that end.

The Company agrees to:

(a) Provide equipment for measuring noise, carbon monoxide and air flow which will be available for use by the Local Safety Committees.

(b) Provide training for members of the Local Safety Committees and appropriate education and training in health and safety for all employes.

(c) Disclose, upon request of the International Safety Committee, the identity of any known harmful chemicals or materials to which employes are exposed, including any information regarding remedies and antidotes for such chemicals.

(d) Provide competent staff and medical facilities adequate to implement its obligation as outlined in (e) below.

(e) Provide to employes who are exposed to potentially harmful agents or toxic materials, at no cost to them, those medical services, physical examinations and other appropriate tests including audiometric examinations, at a frequency and extent necessary to determine whether the health of such employes is being adversely affected. Also to provide the specific tests required for employes in jobs with special physical requirements.

(f) Arrange for regular surveys of each plant by the Company's Industrial Health and Safety staff and provide special surveys at the request of either plant management or the International Union. Upon request, such special survey reports will be provided to the International Union.

(g) Provide access, upon reasonable notice, to all Company plants and locations to health and safety representatives of the International Union. Upon request, reports on such surveys will be provided to the Company.

(h) Provide the Health and Safety professionals of the International Union's staff, when available, the same or equivalent data for all plants that the Company is now required to compile on OSHA Forms #102 and #103 as they are now constituted.

Promptly following ratification of the P&M Main Labor Contract, a ocal Joint Committee on Health and Safety (hereinafter referred to as the Local Safety Committee), will be established in each plant, consisting of one (1) representative for each plant appointed by the Plant Management and one (1) representative for each plant appointed by the Local Unions at that plant except for the Louisville and Indianapolis Plants. The present Union Chairman of the Plant Safety and Sanitation Advisory Committee or his successor, will be the Union representative on the Local Safety Committee and he shall serve an indefinite term and shall be replaced only with the concurrence of the International Safety Committee. The Union member of the Committee will receive training as outlined above, without cost to him. The Local Safety Committee at all plants shall:

(a) Meet at least once each month at a mutually agreeable time and place to review health and safety conditions within the plant and make recommendations in this regard as they deem necessary or desirable.

(b) Accompany Governmental Health and Safety inspectors and International Union Health and Safety professionals on plant inspection tours. Also accompany Company Health and Safety professionals on regular surveys at the plant and surveys requested by the Union. Advance arrangements should be made to permit participation in such surveys.

(c) Review lost time accidents, review plant reports on such accidents and make any necessary or desirable recommendations.

(d) Receive a copy of the plant's report on OSHA Form 102.

(e) Review and recommend local safety education and information programs.

(f) Where necessary, measure noise, carbon monoxide and air flow with equipment provided by the Company as set forth hereinafter.

(g) Make regular inspections of the plant as determined by the International Safety Committee.

It is understood that the Union member of each Local Safety Committee has a regular job to perform and that he will advise his Foreman on each occasion when it is necessary for him to leave his regular job in order to function as a member of the Local Safety Committee. The time he is permitted to be off his job for these and all other safety and health purposes will depend upon the size and complexity of his plant; such time shall be fixed by the International Safety Committee and each plant shall be advised. The Union member of the Local Safety Committee in each plant will be excused from his job without loss of pay on the following occasions:

(a) to accompany Governmental Health and Safety inspectors and International Union Health and Safety professionals on plant tours and Company Health and Safety professionals on Union requested surveys;

(b) to meet monthly with the Company member of the Local Safety Committtee;

(c) to review lost time accident cases, and

(d) to meet in the regular second step grievance meeting during that portion when health and safety issues or grievances are discussed.

It is understood that the Union member of each Local Safety Committee will be paid only for such time spent in performing his functions as occurs during the time when he is otherwise scheduled to work.

The functions of the Local Safety Committee and the manner in which it will operate, at Indianapolis Plant, Hough Plant, Farmall Plant, Louisville Plant, Melrose Park Plant, East Moline Plant and San Leandro Plan, will be determined by the International Safety Committee. When this determination and the determination of the time the Union representative of the Local Safety Committee is to be permitted off his job for Local Safety Committee purposes have been made, the Local Safety Committees ll become operational at all plants and two Local Safety Comiittees ill be activated at Louisville Plant (one for Local 1336 and one for ocal 817) and Indianapolis Plant (one for Local 98 and one for Local 226).

This procedure shall not preclude the filing of a health and safety grievance in step one (1) of the Grievance Procedure. The primary responsibility of resolving differences involving health and safety matters in the Grievance Procedure remains with the Plant supervision and the Local Union representatives.

Grievances arising under these provisions shall not be in the jurisdiction of the Permanent Arbitrator.

Nothing herein shall be construed to restrict any employe's rights under Section 502 of the Labor Management Relations Act, 1947, as amended.

Yours very truly,

Robert F. Crowel
Manager

CEPTED FOR THE UNION:

By: _____

Date: _____

MATERIALS - SOURCES AND RESOURCES

(Much of the material in this bibliography is based on Guide to Worker-Oriented Sources in Occupational Safety and Health, by Daniel M. Berman, Occupational Health Project, Medical Committee for Human Rights, San Francisco.)

I. LIST OF PROJECTS.

The projects are listed by state and city. They are of two types: national and local, though of course there is some overlap. Those which provide services and information nationally are the Occupational Health Project, Medical Committee for Human Rights (San Francisco); Oil, Chemical, and Atomic Workers (Denver); Industrial Health and Safety Project, Urban Planning Aid (Cambridge, Mass.); Committee for Environmental Information (St. Louis); Health/Pac (New York); National Institute for Occupational Safety and Health (Rockville, Maryland and Cincinnati, Ohio); Industrial Union Department, AFL-CIO, (Washington, D.C.); AFL-CIO Labor Studies Center (Washington, D.C.); and the UAW Washington Report (Washington, D.C.). The School for Workers in Madison, Wisconsin performs on both the national and local level. The rest of the projects are self-consciously working on the local level, though what they do can have national implications. If you are interested in becoming involved in work on occupational health and safety, you should contact projects in your area to see what is happening.

<u>California</u>-

Berkeley: **Labor Occupational Health Project**
Institute of Industrial Relations
Center for Labor Research and Education
University of California
2521 Channing Way
Berkeley, California 94720
(415) 642-5507

The project staff includes unionists, scientific workers, and physicians. It is funded mostly by the Ford Foundation. This project will have a real impact in California and perhaps nationally. Dr. Don Whorton is the Project Director. He is also the co-founder of the Occupational Health Project of the Medical Committee for Human Rights.

Los Angeles:
Labor Environment Institute
3084 Manning
Los Angeles, California 90064
(213) 839-0451 (ask for Jim Dahlgren)
(213) 397-8375 (ask for Steve Newman)

A coalition of labor, environmental, and health groups. This group has done a good deal of work around the issues of lead and noise.

Oakland: Bay Area Committee for Occupational Safety and Health (BACOSH)
c/o Jack Rasmus, Secretary
594A Chetwood St.
Oakland, California 94610
(415) 655-4147

BACOSH is now doing educational sessions at different union locals around the Bay Area, using educational materials on specific hazards according to a specific format.

San Diego:

San Diego Committee for Occupational Safety and Health
(SD/COSH)
P.O. Box 99011
San Diego, California 92109
(714) 459-2160; ask for Ruth Heifetz

SD/COSH was founded in the beginning of 1974 and has already completed a preliminary investigation of shipyard conditions in the area. They have found a great many problems in asbestos, welding, and noise and are starting a campaign to get these hazards cleaned up.

San Francisco:

Occupational Health Project
Medical Committee for Human Rights
558 Capp St.
San Francisco, California 94110
(415) 282-6623; (415) 285-4442; (415) 824-5888

The Occupational Health Project is a task force of the Medical Committee for Human Rights, an organization founded in 1964 to provide medical support for civil rights workers in the South. The Occupational Health Project has been in existence since October, 1971. The Project publishes a newsletter several times a year and has contacts throughout the country. Since its founding its main thrust has been to help organize regional grassroots organizations around the issues of occupational health and safety, bringing together unionists, technical specialists, and medical and legal specialists.

San Jose: National Lawyers Guild
National Labor Committee
c/o Smith and Johnson
235 E. Santa Clara, no. 808
San Jose, California 95113
(408) 287-7717

Prints newsletter on radical aspects of labor law, often including items of interest to occupational health and safety organizers. The newsletter costs $4 a year and comes out every 2 months, usually. Ask for Winnie Leeds.

Colorado-

Denver: Occupational Health
Oil, Chemical, and Atomic Workers (OCAW)
P.O. Box 2812
Denver, Colorado 80201
(303) 266-0811

Jeanne Stellman, co-author of Work is Dangerous to Your Health, is head of OCAW's occupational health office. Send for a sheet entitled "Educational Materials Available from the Health and Safety Office."

Connecticut-

New Haven:

New Haven Occupational Health Project
c/o Tony Dominski
473 Elm Street
New Haven, Connecticut
(203) 624-4254

Illinois-

Chicago: Chicago Area Committee for Occupational Safety and Health (CACOSH)
542 So. Dearborn Street, Rm. 508
Chicago, Illinois 60605
(312) 939-2104

CACOSH is the oldest "COSH" organization. It was founded in 1972 in a conference at the University of Illinois School of Medicine which was co-sponsored by many union locals and by MCHR. The organization just held its 3rd annual convention on health and safety.

Maryland-

Baltimore:

Baltimore Healthworkers Action Committee
119 So. Fulton Avenue
Baltimore, Maryland 21223

Call Sue or Charlene at (301) 947-0418; or Al or Sue at (301) 947-8765.

Rockville:

National Institute for Occupational Safety and Health (NIOSH)
5600 Fishers Lane
Rockville, Maryland 20852
(301) 443-2140

For help in the Washington area get in touch with Patricia R. Foley, Special Assistant to the Director, (301) 443-1530, at the same address. To understand what NIOSH can do for you write for A Directory of NIOSH Services and Activities and for Current Publications, both available from the Office of Public Information, P.O. Building, Rm. 536, Cincinnati, Ohio 45202.

Massachusetts-

Cambridge:

Industrial Health and Safety Project
Urban Planning Aid
639 Massachusetts Avenue
Cambridge, Massachusetts 02139
(617) 661-9220

UPA is the oldest "new activist" group in occupational health and safety, and publishes attractively illustrated pamphlets in the field. Write for their "Job Health and Safety Information List" for the materials they make available. Most of their organizing has been in New England, but their pamphlets are usually applicable anywhere.

Springfield:

Workers' Rights Project
New Unity
Box 891
Springfield, Massachusetts 01101

Worcester:

Worcester Occupational Health Project
c/o Frank Farrell
26 Loxwood Street
Worcester, Massachusetts 01604
(617) 757-8427

Michigan-

Detroit:

There is no group in Detroit explicitly set up to do only occupational health and safety, but two people who would know what is going on are:

John Taylor
Glotta, Adelman and Dinges
4th Floor, Hartz Building
1529 Broadway
Detroit, Michigan 48226
(313) 964-1190

Janette Sherman, M.D.
Suite 7
18161 W. 12 Miles Road
Lathrop Village, Michigan 48076
(313) 355-5020

Dr. Sherman is the co-author and principal researcher of A Health Research Group Study on Disease Among Workers in the Auto Industry.

Missouri-

St. Louis:

Workers' Health and Safety Project
c/o Judy Day
7184 Manchester
St. Louis, Missouri 63143
(314) 781-7100

The American Friends Service Committee has hired Judy Day to develop an occupational health and safety project along the lines of "COSH" projects in Chicago and Pittsburgh. Their first work has centered around lead poisoning problems of workers in an OCAW local.

Committee for Environmental Information (CEI)
438 No. Skinker
St. Louis, Missouri 63130

New Mexico-

Albuquerque:

Southwest Research and Information Center
P.O. Box 4524
Albuquerque, New Mexico 87106

Peter Montague of the "Center" has written an up-to-date pamphlet called "Is Fiberglass Safe?" at the request of Local 76 of the Asbestos Workers; the pamphlet includes the relevant scientific documentation.

New York-

New York City:

New York State School of Industrial and Labor Relations (Cornell)
7 E. 43rd St.
New York, N.Y. 10017
(212) 697-2247

Frank Goldsmith teaches at Cornell's NYSSILR and does a great deal of work in occupational health and safety.

Health/ PAC
17 Murray Street
New York, N.Y. 10017
(212) 267-8890

Health/ PAC is known for its independent analyses of the health care system in the United States, and has written some pieces on occupational health issues which are listed in the bibliography of worker-oriented materials. Contact David Kotelchuk.

Society for Occupational and Environmental Health (SOEH)
c/o Dr. Harry Heimann, Executive Director
Environmental Sciences Laboratory
Mt. Sinai School of Medicine
100th St. and 5th Avenue
New York, N.Y. 10029
(212) 650-6173

Membership in the Society is open to anyone recommended by 2 Society members. SOEH is strongly committed to bringing occupational and environmental health issues before publics of workers, scientists, and physicians without a protective attitude toward industry's failings. People with difficult research problems should contact the Society, which can often put them in touch with expert advice. Membership costs $25/ yr.

Ohio-

Cincinnati:

Cincinnati Task Force on Occupational Safety and Health (TROS)
717 So. Crescent
Cincinnati, Ohio 45229
(513) 861-0276; ask for Rafael Moure.

National Institute for Occupational Safety and Health
(NIOSH)
Office of Public Information
P.O. Building, Rm. 536
Cincinnati, Ohio 45202
(513) 684-2723

Send to this office any requests for publications. A Directory of NIOSH Services and Activities and Current Publications are available to help you make a choice of what you want. NIOSH also has offices in Rockville, Maryland (listed on page 3). NIOSH has a number of free pamphlets for worker education about hazardous substances, including short items on tunnel workers and decompression illness, industrial solvents, lead, welding, cutting fluids, silver solder, epoxy resins, chlorine, ammonia, ultraviolet radiation, mercury, ozone, formaldehyde, asbestos, and several others. These pamphlets usually emphasize technical information about the hazards.

Columbus:

Gary Brynner, Superintendent
Division of Safety and Hygiene
Industrial Commission of Ohio
2325 W. 5th Avenue
Columbus, Ohio 43216
(614) 466-3385

Pennsylvania-

Pittsburgh:

Pittsburgh Area Committee for Occupational Safety and Health
(PACOSH)
P.O. Box 7566
Pittsburgh, Pennsylvania 15213
(412) 824-2698

PACOSH is approaching the end of its 2nd year of functioning, and is spreading out from the Pittsburgh area proper, doing educational work in new locations. When you call, ask for Mr. Collonello.

Washington, D.C.-

AFL-CIO Labor Studies Center, formerly of Washington, D.C., has moved to 1000 New Hampshire, Silver Springs, Maryland; (301) 431-6400.

Health Research Group
2000 P Street NW, Suite 708
Washington, D.C. 20036
(202) 872-0320

This brilliant Naderite group does everything well: muck-raking, pamphleteering, organizing, and writing legal and scholarly materials. Sid Wolfe, the director of HRG, is a physician; Bert Cottine is the only lawyer working full-time on the side of workers on occupational health and safety

issues; and Andrea Hricko has a master's degree in public health. HRG has a file of audiologists from all over the country who have agreed to talk, at no cost, to workers' groups on hearing loss problems.

Occupational Health and Safety
Industrial Union Department
AFL-CIO
815 16th Street NW
Washington, D.C. 20006
(202) 393-5581

Sheldon Samuels, Director of Occupational Health and Safety of the IUD is a full-time defender of workers' rights and has taken a leading role in organizations such as the Society for Occupational and Environmental Medicine to steer it in a direction favorable to workers. He will send you his quarterly newsletter IUD Spotlight on Health and Safety, which covers the national scene, to anyone who sends in a postcard with their name and address. It will help keep you abreast of important happenings in Washington.

International Association of Machinists (IAM)
Health and Safety
1300 Connecticut Avenue NW
Washington, D.C. 20036
(Angelo Cefalo)

PROD ("Professional Drivers' Organization")
P.O. Box 69
Washington, D.C. 20044
(202) 833-9700

Annual membership: $20. A newsletter is produced by Arthur Fox II every two months. PROD is "a public interest Washington lobby representing the professional driver's safety and health related interests in the halls of the federal government. Much of the work is legal, and the members are mostly over-the-road truckers.

UAW Washington Report
1125 15th St. NW
Washington, D.C. 20005
(202) 296-7484

Frank Wallick is the editor of UAW Washington Report, the United Auto Workers' staff newsletter, which contains a great deal of health and safety information. If you want to receive this newsletter, write a letter explaining why to the President's Office, UAW, 8000 E. Jefferson Avenue, Detroit, Michigan 48214. You should also read Frank's book The American Worker: An Endangered Species (Ballantine Books, Inc., 101 5th Ave., New York, N.Y. 10003, 1972).

United Mine Workers of America
1437 K Street NW
Washington, D.C. 20005
(202) 638-0530

Ask for Dr. Lorin E. Kerr or Davitt McAteer for anything to do with coal mine health and safety. The United Mine Workers Journal contains all sorts of materials on health and safety, and comes out twice a month. A subscription is $1/yr. Requests for subscriptions should be addressed to: UMWA Publications Office, 2457 E. Washington, Indianapolis, Indiana 46201.

West Virginia-

Morgantown:

People's Appalachian Research Collective
321 Richwood Avenue
Morgantown, West Virginia 26505
(304) 292-7663

Robb Burlage is in touch with a number of health and safety groups in the Appalachian region.

Wisconsin-

Madison: Occupational Health Group
c/o Near Eastside Community Health Center
1133 Williamson Street
Madison, Wisconsin 53703

You can also call Joe Bowman (608) 255-8554 or Helen Laukenau at (608) 255-5764.

School for Workers
University of Wisconsin Extension Program
432 No. Lake Street
Madison, Wisconsin 53706
(608) 262-2111

The School for Workers educates workers in health and safety, and has received a grant of $300,000 from OSHA to do training.

Milwaukee:

John Waldmer
3547 So. 5th Street, Apt. 2
Milwaukee, Wisconsin 53207
(414) 481-9071

John Waldmer is one of the most knowledgeable people in occupational safety and health. A voracious reader, he is on the executive board of United Electrical Workers Local 1111 in Milwaukee, and should be called on by anyone in Wisconsin.

Many of the projects mentioned here put out newsletters or other written materials. It would be an excellent idea for each project to be on others' mailing lists so that a more extensive exchange of ideas and experiences can take place.

II. WORKER-ORIENTED PAMPHLETS AND BOOKS ON OCCUPATIONAL HEALTH AND SAFETY.

The books and pamphlets listed here may be obtained from the sources mentioned in the descriptions or from one of the projects listed in Part I. Most of the groups producing good pamphlets work on a shoestring, so be patient if they do not respond immediately.

Collective Bargaining:

Collective Bargaining for Occupational Health and Safety, A Report on Contract Clauses and Negotiated Programs, compiled by Bruce Poyer, Coordinator, Occupational Health Project, Center for Labor Research and Education, University of California, Berkeley, California.

Free; contains copies of recent health and safety clauses: United Auto Workers; United Farm Workers; United Rubber Workers; Oil, Chemical, and Atomic Workers; and United Steel Workers contracts. 17 pages.

Contract Clauses for Occupational Health and Safety, Urban Planning Aid, Cambridge, Massachusetts, 14 pages, $1.00. Suggested clauses organized under the headings: (1) duties of the company; (2) union access to information; (3) the joint safety committee; (4) state and federal laws; (5) education and research.

To Eliminate Industrial Health Hazards, an explanation of the new health and safety clauses in contracts between OCAW and various oil companies. Introductory essay by Barry Commoner; available from Occupational Health and Safety, OCAW, Denver, Colorado; 13 pages, free.

How to Think About Collective Bargaining in Health and Safety; Occupational Health Project, MCHR, San Francisco, California; 16 pages; 50¢.

MCHR's Suggested Bargaining Demands on Health and Safety; Occupational Health Project, MCHR, San Francisco, California, 4 pages, 15¢.

Dealing With Your Own Workplace:

Be Your Own Inspector; describes instruments you need to scientifically measure environmental quality in the workplace by yourself; where to get them, how much they cost, etc. From Urban Planning Aid, Cambridge, Massachusetts; 2 pages; 15¢.

How to Look at Your Plant; Urban Planning Aid, Cambridge, Massachusetts, 40 pages, 50¢. A coherent, attractively illustrated pamphlet.

How to Run an Occupational Health and Safety Task Force; by Will Shortel of the Chicago Area Committee for Occupational Safety and Health (CACOSH); available from Occupational Health Project, MCHR, San Francisco, California; 6 pages; 20¢. Tells how a group such as CACOSH should approach an individual shop to deal with health and safety hazards.

A Job Health and Safety Program On a Limited Budget, by Daniel M. Berman; 20 pages, 40¢. Available from Occupational Health Project, MCHR, San Francisco, California. Shows how to analyze and correct health and safety hazards in your shop, without depending on expensive outside experts. Based on a program carried out at a Teamsters Local 688 shop in St. Louis, Missouri.

IAM Guide for Safety and Health Committees, available from the International Association of Machinists, Washington, D.C., probably free.

Occupational Hygiene Testing Equipment for the Safety and Health Technician; from School for Workers, Madison, Wisconsin, 2 pages, 15¢. A list of 8 instruments needed for testing environmental conditions within a plant which unions would need for a full testing program within their plant.

A Safety Program for the Local Lodge; from the International Association of Machinists, Washington, D.C.; 28 pages; probably free in small quantities. Advocates setting up an independent union-run safety committee and shows how to do it.

Films, Slideshows, Etc.:

All In a Day's Work: A Dirty Story; 61 slides, cued to a script read by a narrator; 25 minutes long. "Does not go into either specific health and safety hazards or the OSHA in detail but it does give a good introductory overview on these topics. To be most effective it should be used in conjunction with other training materials such as the Guide to OSHA and the Questionnaires." By Urban Planning Aid, Cambridge, Massachusetts. Free to borrowers.

Films and Filmstrips On Occupational Safety and Health; lists about 100 films, mostly by companies and industry trade associations, on topics of occupational safety and health. All are supposed to be free. Get this catalog from the Office of Public Information, NIOSH, Cincinnati, Ohio. Includes films in the following categories: construction and plant safety; alcoholism; chemicals; electricity; equipment; eyes and vision; falls, slips, and backs; fire; general safety; hospitals; industrial medicine; laboratory safety; lead; mental health; mercury; mining; noise; nursing; pesticides; power tools; protective devices; radiation; rehabilitation; school safety; skin; supervision; welding.

Working and Lung Disease, (slide show), free on loan to OCAW locals, $15.00 rental to others, $50.00 purchase. Available from Health and Safety Office, OCAW, Denver, Colorado. This office will soon have available slide shows on welding and skin diseases.

General Works:

The American Worker: An Endangered Species, by Frank Wallick. Available for $1.20 from the UAW Education Office, 8000 E. Jefferson, Detroit, Michigan 48214 or for $1.60 from Ballantine Books, 101 5th Avenue, New York, N.Y. 10003. A solid analysis of the problems of occupational health and safety, with lots of ideas on how to clean things up, this book has been very well received, especially by trade unionists. Frank is the editor of UAW Washington Report and has been in the forefront of health and safety work for years. 245 pages.

Death On the Job: The Politics of Occupational Health In the United States, available from the Occupational Health Project, MCHR, San Francisco, California; photocopy: $15. By Dan Berman. It was written to answer organizers' questions. It is very carefully documented. Ruth Heifetz of San Diego/ COSH found it "very useful" and Tony Mazzocchi read the whole thing and writes that he "learned a great deal" from it.

If you can't spare the $15, send back the manuscript when you are through with it and MCHR will refund $14. The final chapter: "The Future Politics of Occupational Health," assesses where the Occupational Health movement is going and suggests strategies for the continued expansion and deepening of the movement.

Occupational Disease and Public Policy: New Challenges to Corporate Control, by Daniel M. Berman and Donald Whorton; 2 pages; 15¢. Available from the Occupational Health Project, MCHR, San Francisco, California.

Work Is Dangerous To Your Health, by Jeanne M. Stellman, Ph.D., and Susan M. Daum, M.D.; (A Handbook of Health Hazards in the Workplace and What You Can Do About Them) (Vintage Books, New York, 1973); 450 pages. The price can vary with the buyer; if you buy from OCAW Health and Safety in Denver, Colorado the prices will be as follows:

	Paperback	Hardcover
OCAW members	$1.35	$6.00
other unionists	1.50	7.50
non-union	1.95	7.50

If you write Jeanne Stellman at OCAW in Denver that you are doing a low-budget project in occupational health, you can buy Work Is Dangerous... at the lowest rates. It is a big book and has almost everything you always wanted to know...written in language you can understand.

Workers' Safety and Health, a Sept. 1972 Health/PAC Bulletin; 24 pp., 50¢; available from Health/PAC in New York, New York. A very good short treatment of the general politics of occupational health and safety.

Your Job or Your Life; an issue of the Health/PAC Bulletin devoted to asbestos; March 1973, 16 pp., 50¢. A solid account of the dilemma workers face on well-paying but poisonous jobs.

Keeping Up: On-Going Information Services:

IUD Spotlight on Safety and Health, a quarterly newsletter which gives a good perspective on national developments, particularly with OSHA and NIOSH. Available from Occupational Health and Safety, IUD, AFL-CIO, Washington, D.C.

Lifelines (monthly newsletter), $3.00/yr., from Occupational Health and Safety, OCAW, Denver, Colorado. Very good, and has excellent hazard sheets on different subjects. The important aspect about Lifelines is its taste of OCAW's combative stance toward health and safety.

Monitor (monthly newsletter), $10.00/yr. to organizations and $3.00/yr. to individuals. From Labor Occupational Health Project, U.C. Berkeley. First issue was October, 1974.

Occupational Hazards
614 Superior Avenue West
Cleveland, Ohio 44113
(216) 696-0300

A readable trade magazine covering issues in occupational safety and health from the point of view of the "safety professional" of the company. Keeps you tuned in to management points of view and upcoming struggles. Monthly, $12/yr.

Occupational Health Project Report, quarterly newsletter of the Occupational Health Project, MCHR, San Francisco. Written by Dan Berman, Director. Berman tries to keep up with all union-oriented activity in the field, particularly with the new groups springing up on health and safety issues at the local and regional level. $5/yr.

Occupational Health and Safety Letter; by Gershon Fishbein, 1097 National Press Bldg., Washington, D.C. 20004; 8 pages appearing twice a month. $75 a year. Useful to have access to one of these.

Survival Kit, a health and safety newsletter, available from Urban Planning Aid, Cambridge, Massachusetts. Appears every 2 months, and oriented primarily to Massachusetts, it contains items of interest to any health and safety organization, in addition to excellent graphics. $2/yr.

UAW Washington Report; written by Frank Wallick, this is the UAW staff and shop steward newsletter. Contains many items on health and safety, and can be received free by writing: President's Office, UAW, 8000 E. Jefferson Avenue, Detroit, Michigan 48214, and explaining who you are and why you want it.

United Mine Workers Journal contains many items on coal mine health and safety, and is probably the best union newspaper in the country. Subscription is $1 a year; address requests for subscriptions to UMWA Publications Office, 2457 E. Washington, Indianapolis, Indiana 46201. Appears twice a month.

Cal/OSHA and OSHA:

All About OSHA (the who, what, where, when, why, and how of the Occupational Safety and Health Act of 1970.) Available from the Office of Information Services, OSHA, U.S. Dept. of Labor, Washington, D.C. 20210. Best publication from OSHA about OSHA, and it's free. 23 pages.

Cal/OSHA, A Worker's Guide to California's New Occupational Safety and Health Act, prepared by attorney Tom Rankin, who is associated with BACOSH. For copies send 25¢ to Tom Rankin, Consultant Services, 10290 San Pablo Avenue, Suite #102-103, El Cerrito, California 94530, or call (415) 526-5056.

Cal/OSHA Manual, $15.00 from J&B Publishing, P.O. Box 2383, Alameda, California 94501. A simplified explanation of Cal/OSHA requirements.

Employee Access to Information, 4 pages, free, from School for Workers, Madison, Wisconsin. "Certain kinds of information related to OSHA safety inspections and citations" are available to workers if they know how to request it. This pamphlet does not deal with getting health and safety information directly from employers.

How to Put the Occupational Safety and Health Act to Work - A Guideline for Stewards, by William O. Kuhl, Education Dept., and Michael Wood, International Representative, International Brotherhood of Boilermakers, 570 New Brotherhood Building, Kansas City, Kansas 66101. This excellent pamphlet can fit into your breast pocket. 29 pages.

OSHA Inspection Procedure, School for Workers, Madison, Wisconsin. This pamphlet combined with the School for Workers' pamphlet "OSHA: Making the Best Use of the OSHA Walkaround" are the best short pamphlets dealing with inspections. In many states, enforcement is no longer being handled by Federal OSHA, so these pamphlets are almost useless. 4 pages, free.

OSHA - Making Best Use of the OSHA Walkaround, School for Workers, Madison, Wisconsin. 4 pages, free.

OSHA - Worker Rights and Responsibilities Under OSHA, School for Workers, Madison, Wisconsin. 4 pages, free.

Questions and Answers to Part 1910, the OSHA General Industry Standards, available for free from the Office of Information Services, OSHA, U.S. Dept. of Labor, Washington, D.C. 20210. Answers some questions workers might have about the most important set of OSHA standards. 30 pages, free.

Rights and Responsibilities of Employees Under Cal/OSHA, 34 pages produced by the Labor Occupational Health Project. Free by writing to LOHP, Institute of Industrial Relations, Center for Labor Research and Education, U.C. Berkeley, 2521 Channing Way, Berkeley, California 94720. A booklet designed to help the employee eliminate hazardous conditions on the job by using the Cal/OSHA law.

A Trade Union Guide to the Occupational Safety and Health Act, International Association of Machinists, 1300 Connecticut Avenue NW, Washington, D.C. 20036.

A Unionist's Guide to the Occupational Safety and Health Act of 1970, Urban Planning Aid, 16 pages, 35¢, Cambridge, Massachusetts.

ALSO

Assembly Bill 150 - the Cal/OSHA law. A must for the union Health and Safety Committee library. Call your area DIS office or write your State Assemblyman for a free copy.

Public Law 91-596 - The OSHA law. Write or call your OSHA Area Director, your Senator or Congressman for a free copy.

Specific Hazards:

This section lists available pamphlets. Several groups put out information on specific hazards in a different format. Stellman and Daum's Work Is Dangerous To Your Health (already listed under "General Works") covers most hazards to be found in the workplace. The National Institute for Occupational Safety and Health (NIOSH) makes available a series of pamphlets on specific hazards, which are listed under "Projects" in Part I under Cincinnati, Ohio. The Massachusetts Division of Industrial Hygiene produces a series of "Recommended Safety Practice Bulletins" which are printed on single sheets.

The Massachusetts Division of Occupational Hygiene, 39 Boylston St., Boston, Massachusetts 02116, (617) 727-3982, has prepared over 100 "Recommended Safe Practice Bulletins" for public distribution. Write them for copies and for a list of what they have available. Sometimes the discussion of hazards is not as critical as it should be. For example, the bulletin on "Noise" mentions the U.S. Dept. of Labor standard for permissible noise exposure (which allows no more than exposure for 8 hours at 90 decibels) without mentioning that a substantial percentage of workers will suffer hearing loss if exposed to a lower level year after year. Best of all, however, is that the sheets are written in non-technical language accessible to the average reader, and each hazard usually occupies only one sheet. In the past the Division of Occupational Hygiene has given permission to reproduce these sheets for educational sessions so long as credit was given to the Division.

ASBESTOS:

Asbestos; The Hazards of Sprayed Fireproofing, by Asbestos Workers Local 34 and Minnesota Public Interest Research Group. For copies contact: Asbestos Workers Local No. 34
c/o Albert DeCosse
708 So. 10th St.
Minneapolis, Minnesota 55404
10 pages, 25¢.

AUTO INDUSTRY:

A Health Research Group Study On Disease Among Workers In the Auto Industry, by Janette Sherman, M.D., Sidney Wolfe, M.D., Andrea Hricko, M.P.H., Marilyn Mets, M.S.,; 43 pages, $2.00; available from Health Research Group, Washington, D.C.

BENZENE:

Benzene, Is It Dangerous? by Jeanne M. Stellman, Susan Cottingham, and Andrea Hricko; available from Health Research Group, Washington, D.C.; or Occupational Health and Safety, OCAW, Denver, Colorado; 13 pages, 75¢.

COTTON DUST:

Byssinosis, the Cotton Dust Disease, by Don Whorton, M.D., available from Occupational Health Project, MCHR, San Francisco, California; 10 pages, 40¢.

FIBERGLASS:

Is Fiberglass Safe? by Peter Montague, Ph.D., 14 pages, photocopy, 60¢, available from the Southwest Research and Information Center, Albuquerque, New Mexico.

FLOORS:

Floors - Know the Law and Use It, summary of the federal OSHA standards from Federal Register, v.37, Oct. 18, 1972; 15¢ from Urban Planning Aid, Cambridge, Massachusetts, from Survival Kit, December, 1972.

HYDROGEN FLUORIDE:

Hydrogen Fluoride: Is It Dangerous? Available from OCAW, Denver, Colorado. 4 pages.

MERCURY:

Mercury and Its Compounds, Are They Dangerous? by Janet R. Bertinusson and Jeanne M. Stellman, available from Occupational Health and Safety, OCAW, Denver, Colorado, 12 pages, 25¢ for OCAW members; $1.00 for others.

METAL CUTTING AND WELDING:

Metal Welding and Cutting, How to Protect Your Health, 8 pages, 25¢, Urban Planning Aid, Cambridge, Massachusetts.

NOISE:

Fighting Noise...A Manual for Worker Action, available from Health Research Group, Washington, D.C. or Urban Planning Aid, Cambridge, Massachusetts, 18 pages, 50¢.

Noise and Your Job, 8 pages, 30¢, available from Urban Planning Aid, Cambridge, Massachusetts.

OFFICE WORK:

The Hazards of Office Work, a questionnaire by Marsha Love, available from Health-PAC, New York, N.Y., 25¢. "Working conditions in your office affect your health. To find out how much, ask yourself the following questions..."

REFINERIES:

Health Hazards in Petroleum Refineries, free to OCAW members, 50¢ to others, available from Occupational Health and Safety, OCAW, Denver, Colorado.

SILICOSIS:

Silicosis, a fact sheet from Urban Planning Aid, Cambridge, Massachusetts, in the December, 1972 Survival Kit, 15¢.

SKIN DISEASE:

Dermatitis, a one page fact sheet in Survival Kit, June, 1973, from Urban Planning Aid, Cambridge, Massachusetts.

Workers' Compensation, 3rd Party Suits, Medical Malpractice Against Company Physicians

"Access to Medical Records," by D. Helfman, G. Jarrett, S. Lutzker, K. Schneider, P. Stein; in Appendix, Report of the Secretary's Commission on Medical Malpractice, Jan. 16, 1973, DHEW Publication No. S 73-89; available from U.S. Govt. Printing Office, stock number 1700 00114, pp. 177-213; 37 pages. Available for $1.50 from the Occupational Health Project, MCHR, San Francisco, California.

This article is important for its summary of the laws and cases state-by-state on access to medical records and medical information, which is almost always guarded closely by companies. As the article points out: "Nine states have statutes specifically allowing patients or their attorneys to inspect hospital medical records." But in spite of the theoretical right of patients to see their records, direct access by the patient is almost impossible, as the Boston Globe showed in an article on medical records in Massachusetts.

Materials on Medical Malpractice Against Industrial Physicians, compiled by Attorney Robert K. Crawford, San Francisco, from materials in Citations, Inc. These materials, which are available from a good law library, add up to 150 pages, and annotate the case law, state by state, for the following questions:

28 ALR3rd 1066-1127: "Right to Maintain Malpractice Suit Against Injured Employee's Attending Physician Notwithstanding Receipt of Workmen's Compensation Award."

16 ALR3rd 564-622: "Employer's Liability to Employee for Malpractice of Physician Supplied by Employer."

10 ALR3rd 1071-1077: "Physician's Duties and Liabilities to Person Examined Pursuant to Physician's Contract with such Person's Prospective or Actual Employer."

20 ALR3rd 1109-1122: "Physician's Tort Liability, Apart from Defamation, for Unauthorized Disclosure of Confidential Information About Patient."

69 ALR2nd 1213: "Master's Liability for Failure to Inform Servant of Disease or Physical Condition Disclosed by Medical Examination."

The Occupational Health Project, MCHR, San Francisco, California, will send you the above materials for $10. The materials should be updated for the last year or two, but clearly there exist grounds for many medical malpractice suits against company physicians. In Contra Costa County, California, a jury awarded $351,000 to a man who had worked with asbestos for over 3 decades. Between 1959 and 1968 physicians paid by the worker's employer had detected asbestosis 4 times without informing him. This settlement against the company physician was 10 times the maximum amount allowable under workers' compensation.

Theories of Liability in Third Party Litigation, 2 pages, 15¢, available from attorney Robert K. Crawford, c/o Hoberg, Finger, Brown, and Abramson, 703 Market Street, San Francisco, California 94103; (415) 982-0780.

Explains how you may be able to get around the workers' compensation system by suing manufacturers and sellers of defective materials and products which injure you in the workplace.

Testimony on the "National Workers' Compensation Standards Act of 1973" before the Subcommittee on Labor, U.S. Senate, by Daniel M. Berman, Director, Occupational Health Project, MCHR, Jan. 31, 1973, 20 pages, 75¢.

Emphasizes the importance of passing strong coverage for occupational disease and for ensuring the worker the right to choose his or her own physician in compensation cases.

What To Do When Injured, 2 pages, 15¢, 20 for a dollar; tells you what to do when injured or sickened by your job. Written for Massachusetts workers, and available from Urban Planning Aid, Cambridge, Massachusetts.

Workmen's Compensation, A Worker's Guide to the California Workmen's Compensation System, by Alexis Rankin, 10 pages, published by Consultant Services, 10290 San Pablo Avenue, El Cerrito, California 94530, (415) 526-5056.

Prices: 1-10 copies: 45¢ each
11-50 " 35¢
51-100 " 25¢

Additional Materials:

Muscle and Blood by Rachel Scott. $8.95. E.P. Dutton and Co., Inc., 201 Park Avenue South, New York, N.Y. 10003.

Expendable Americans, Paul Brodeur's book based on his "Annals of Industry" series in the New Yorker. Available from Dept. VLD, Viking Press, 625 Madison Avenue, New York, N.Y. 10022. An excellent expose of the "medical-industrial complex" as it operates in the asbestos field.

The Hazards of Work: How To Fight Them by Patrick Kinnersly, Pluto Press. Can be ordered from Midnight Special, 1335-1/2 West Washington Blvd., Venice, California 90291 at $3.00. The book was written by a shop worker and has useful material about organizing for health and safety, but since it is a British book none of the material on the law is useful in the U.S.

Job Safety and Health: a magazine put out by the Labor Department's Occupational Safety and Health Administration (OSHA). Job Safety and Health has some interesting articles. Of course it doesn't openly criticize the OSHA administration, but others can take care of that. Address correspondence to Editor, Job Safety and Health, OSHA, 1726 M Street NW, Washington, D.C. 20210; (202) 961-2049. This monthly costs 80¢ an issue and a subscription is $9.05/year, from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402.

Occupational Safety and Health - A Bibliography (PB 230 147), 1974, U.S. Department of Labor. Distributed by: National Technical Information Service, U.S. Dept. of Commerce, Springfield, Virginia 22151. This publication (363 pages) consists of an annotated bibliography of public sources treating occupational safety and health both generally and specifically. The literature included deals primarily with causes and possible prevention of occupational injury and disease. An excellent reference resource.