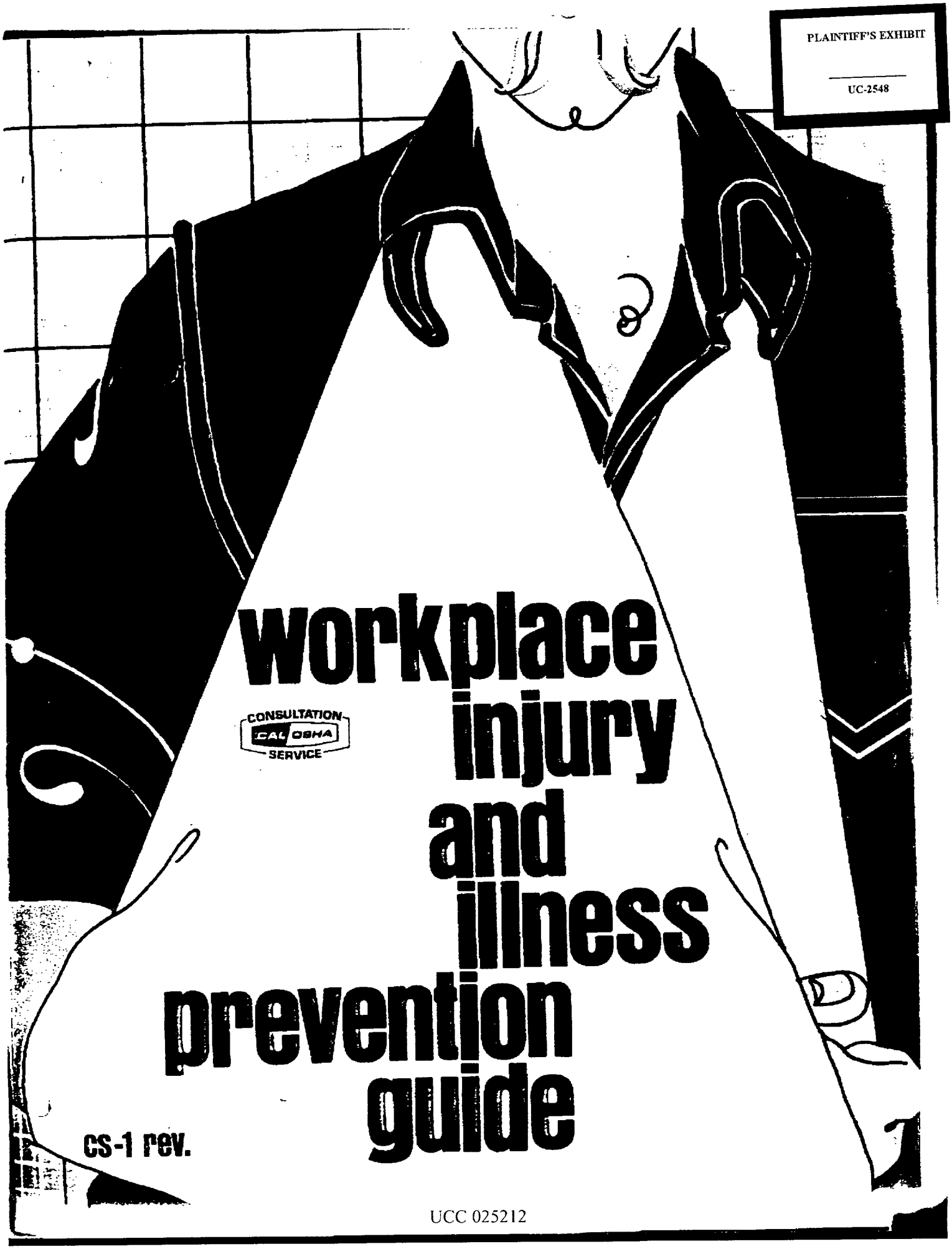
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UC-2548



workplace injury and illness prevention guide

CONSULTATION CAL OSHA SERVICE

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workplace injury and illness prevention guide

CONSULTATION CAL OSHA SERVICE

California Department of Industrial Relations

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about this booklet

This workplace injury and illness prevention guide was developed and is published by the Cal/OSHA CONSULTATION SERVICE, a program of the California Department of Industrial Relations.

Its purpose is to assist California employers in meeting their legal obligations as required by the Occupational Safety and Health Act of 1973 (Cal/OSHA) and to encourage voluntary compliance with the law.

The contents of this booklet are based on those Cal/OSHA standards and other requirements in effect at the time of publication, along with generally accepted principles and activities within the field of job safety and health. However, the material contained herein is intended solely as a guide and not to serve as a substitute for, or legal interpretation of, any Cal/OSHA provision, or to place any additional requirements on employers or employees.

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preface

In California, each employer* has a legal obligation to provide and maintain a safe and healthful workplace for his or her employees, according to the California Occupational Safety and Health Act of 1973.

This booklet is intended to cover the basic things employers need to know about their responsibilities, and it also outlines steps that can be taken to assure the safety and health of employees while at the worksite.

Section 1 describes California's requirements for an injury and illness prevention program to protect workers and explains the benefits of such a program.

Section 2 sets forth eight basic elements of a successful injury and illness prevention program.

Section 3 tells you how to start your own voluntary compliance efforts.

Section 4 explains the free Consultation Service and how to obtain assistance.

Section 5 contains a suggested checklist for helping you make your own periodic safety and health inspections.

* The term "employer" as used in the Cal/OSH Act includes, any person or corporation, the state and every state agency, every county, city or district and public agency therein, which has any person engaged or permitted to work for hire, except for household services.

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section 1 injury and illness prevention

In California, every employer is required to have and maintain an effective occupational injury and illness prevention program.

The requirement is contained in General Industry Safety Order 3203,* and states: "3203. Accident Prevention Program.

(a) Every employer shall inaugurate and maintain an accident prevention program which shall include but not be limited to the following:

(1) A training program designed to instruct employees in general safe work practices plus specific instruction with regard to hazards unique to any job assignment.

(2) Scheduled periodic inspections to identify and correct any unsafe conditions and work practices which may be found."

"instruct employees in general safe work practices" means work practices that generally apply to most of the employees at the worksite. Examples of general work practices might include lifting procedures, use of personal protective equipment, knowledge of exits, medical and first aid procedures, housekeeping practices, fire protection procedures, evacuation plans, or handling of flammables and toxic chemicals.

"specific instruction with regard to hazards unique to any job assignment" means training on the hazards and safe work practices specific to any individual employee's work assignment. Examples of specific instruction might include training in use of self-contained breathing apparatus, proper procedure for locking or blocking-out machinery, proper use and adjustment of machine guards, or handling of hazardous substances.

"scheduled periodic inspections" means inspections of the workplace at sufficient intervals to ensure that established safe work practices are being followed and that unsafe conditions or procedures are identified and corrected promptly. Frequency of inspections should be affected by the type, expectation and magnitude of hazards involved; proficiency of employees; equipment or process changes; and injury/illness rates. Safety Order 3203 covers the minimum acceptable elements for an accident prevention program. It was adopted because records show that a high percentage of occupational injuries and illnesses are preventable through effective education and training, plus periodic inspections of the workplace.

* Title 8 California Administrative Code (CAC). Additional requirements may also apply. See Construction Safety Order Section 1509, Title 8, CAC.

section 2 eight-point workplace program

While details may vary, there are eight basic elements present in every effective occupational injury and illness prevention program. Regardless of the size or type of your operations, you should include each of these points to the degree necessary.

If followed, the eight-point approach to injury and illness prevention in the workplace should improve the efficiency of your operation, while reducing related costs. Although it may not guarantee complete compliance with the Cal/OSHA Standards, having an organized injury and illness prevention program will demonstrate your concern for your employees' well-being and provide you with documented evidence of your good faith.

An effective injury and illness program need not involve large costs nor require additional employees. Usually it can be integrated rather easily into your other operations with a minimum of effort.

But the key to the success of this plan is to see it as a part of your total operations and reflected in all your work. As you start doing it, the program becomes easier. It becomes built-in and then you need only to check it once in a while to be sure everything's working well.

Following are descriptions and illustrations for each of the eight points. Since most employers are pressed for time, these descriptions are capsules of information to assist you in thinking through your own approach.

Read through them quickly the first time, so that you get the overall impression, and see how each point is related to the others. Later, when you have read the entire booklet, you may want to use them as a guide for structuring your own Injury and Illness Prevention Program.

eight-points

1. Management leadership
2. Assignment of responsibility
3. Identification and control of hazards
4. Employee and supervisor training
5. Safety and health recordkeeping
6. First-aid and medical assistance
7. Employee awareness, acceptance and participation
8. Accident investigation

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point 1: management leadership

As an employer, your attitude toward job safety and health will be reflected by your employees. If you are not interested in preventing accidents, nobody else is likely to be.

At all times, demonstrate your interest in safety and health and give these matters the attention they require. Leave no doubts about your personal concern for employee safety and health and the priority you place on them in your workplace. Your policy must be clearly set and understood.

As a first step, make sure that the Cal/OSHA workplace poster, Job Safety and Health Protection, is posted where it can be seen easily by all employees. This is a Cal/OSHA requirement.

Then, consider taking the following actions:

* Call a meeting with all employees to discuss job safety and health matters. Discuss your mutual responsibilities under the Cal/OSHA law, and explain clearly your concern about achieving a safe and healthful workplace.

* Show all your employees related sections of the California Labor Code (Division 5) and applicable subchapters of the California Administrative Code, Chapter 4, Title 8 (available for purchase from the Office of Procurement, Publications Section, Post Office Box 1015, North Highlands, CA 95660). Tell them where these will be kept and where employees may have access to them.

* Issue a written Policy Statement to reinforce the fact that you are serious about safety and health. The statement should set forth your intention and desire to maintain a successful injury and illness prevention program, comply with all safety and health standards, and that you expect to have the full cooperation of all employees. The Policy Statement can be posted near the Cal/OSHA workplace poster, so that each employee is reminded of your concern.

* Establish a "Code of Safe Practices and Operating Procedures" setting forth specific instructions and rules to keep your workplace safe and healthful.

* Include job safety and health items in all meetings, whether they involve top management, supervisory personnel, or other employees.

* Personally review all inspection and accident reports to ensure follow up where needed.

* Set a good example! If, for instance, you require hard hats to be worn in certain areas, then you should wear a hard hat when you are in that area, too.

point 2: assignment of responsibility

In terms of management responsibility, the supervisors of your employees are usually your key personnel in all operations.

After you have established your basic policy, you can delegate the details for carrying out your program to those same people to whom you delegate your operating and production details. If you have supervisors, group leaders, "straw bosses", or other key people, you can assign them specific responsibility for safety and health and hold them accountable for getting the job done. You must also make it part of their job to operate in a safe and healthful manner.

Of course, if your operation is small and you are the only supervisor, then you must assume the responsibility for the safety and health activity. This should not be too great a burden since, as the employer, you have an everyday knowledge of the problems of your operations.

And, when considering responsibility, don't forget to include all of your employees. Give each employee training and responsibility to follow your safety and health procedures and to recognize and report hazards in his or her immediate work area. Also, inform each employee of his or her responsibility under Labor Code Section 6407, which requires that every employee shall comply with occupational safety and health standards applicable to their own actions and conduct.

And one extra thought for the future: Remember that as your operation grows in size, the number of people who must be given job safety and health responsibility also grows. If you have total responsibility now, don't neglect to delegate responsibilities to key employees when the proper time comes. (Do not merely delegate this to a committee. The responsibility should always be clear and personal.)

point 3: identification and control of hazards

To maintain a safe and healthful workplace, you need to do two things:

1. Identify workplace hazards which exist now or could

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develop, using the Cal/OSHA safety and health standards to help you identify hazards.

2. Institute procedures to control these hazards and take action to eliminate them.

But, where and how do you start?

To begin, you must remember that this activity will have to be keyed to your workplace - - your materials, your processes, you employees, your operational needs. So, you need concern yourself only with those things that apply to your particular workplace.

Then, it is helpful to look upon this activity as a two stage process:

1. Getting started initially and improving to a satisfactory level.
2. Maintaining this activity at a satisfactory level over a period of time.

Many employers will find when they read Section 3 that they may already have the basis for an effective program, perhaps without realizing it.

The second stage, maintaining a satisfactory level, is as important as the first, and it should prove the easier to perform. This is because you will have already identified your possible hazards and instituted change to offset or eliminate them. You know what your problems are, and you know what you did about them. Now you must make sure that what you did remains done. If you have started any special controls, or a workplace code of safe practices and operating procedures, then these must be monitored and remain controlled in the future. For this, you will want to use a periodic self-inspection program.

In Section 3, we also present a basic approach you can use to develop your own ongoing self-inspection program. Note that we have made no attempt in this booklet to indicate how often you should do self-inspections, what types of equipment or procedures you should use, or specifics on how to obtain the best results. These will be for you to decide as you go along, since the details of this activity are keyed to your particular workplace.

But since there seem to be exceptions to every rule, we should mention two which may occur.

First, some occupational safety and health standards require specific tests and checkups to be made at certain times or over certain time periods. If you find that you are subject to one of these time inspection requirements, then that must be part of your self-inspection program, and you must conform to the requirements. (Some of the questions in the checklists in Section 5 include these time requirements.)

Second, present requirements may change or new ones may be added. Since job safety and health hazards are dynamic, it follows that new discoveries will be made just as new materials, new machines, new products and new processes continue to appear on the market. You will need to keep abreast of these changes. This should not be difficult, since the news media, trade associations, etc., assist in spreading this new information.

point 4: employee and supervisor training

An effective injury and illness prevention program requires proper job performance from everyone in the workplace.

As the employer, you must ensure that all employees know about the materials and equipment they are working with, what known hazards are present, and how you have controlled or intend to eliminate them.

Each individual employee needs to know and understand the following (especially if they have been included in your injury and illness prevention policy or in a "code of safe practices"):

* No employee is expected to undertake a job until he or she has received instructions on how to do it properly and has been authorized to perform that job.
* No employee should undertake a job that appears to be unsafe or use chemicals without understanding their toxic properties.
* Mechanical safeguards must be in place, and kept in place.
* Each employee is expected to report to you all unsafe conditions encountered during work.
* Any injury or illness suffered by an employee, even a slight one, must be reported to you at once.
* You have started a safety and health program, and are willing to go further as necessary when new methods are discovered.

In addition to the above, any safety rules that are a condition of employment, such as the use of safety shoes or eye protection, should be explained clearly and enforced.

Your supervisors must know how to train their em-

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ployees in the proper way of doing their jobs. Encourage and consider providing your supervisors with supervisory training. (Many community colleges offer management training courses at little or no cost.)

In addition, there are some specific training requirements in the Cal/OSHA standards which you must meet, such as those which pertain to first aid, powered industrial trucks, including forklifts. In general, they deal with situations where the use of untrained or improperly trained operators on equipment or machinery could cause hazardous situations to develop, not only for the operator, but possibly for nearby workers.

Particular attention must be given to your new employees. Immediately upon arriving at work, new employees begin to learn things and form attitudes about their workplace, their job, their boss, and their fellow employees. They do so whether or not the employer makes an effort to train them. If you train them during those first few hours and days to do things the right way, you may avoid considerable losses over a period of time.

At the same time, attention must be paid to your regular employees, including the old timers. Old habits can be wrong habits. An employee who continues to repeat an unsafe procedure is not working safely, even if an accident has not resulted from this condition.

While every employee's attitude should be one of determination that accidents can be prevented, one thing more may be needed. You should stress the responsibility you have assigned to the person in charge of the job—as well as to all other supervisors in your employ—to be sure that there is a concerted effort underway at all times to follow every safe work procedure and health practice applicable to that job. It should be explained clearly to these supervisors that you do not want them to silently condone unsafe or unhealthful activity in or around your workplace.

Finally, here are some less specific indicators which might show a need for training or retraining:

* Excessive waste or scrap
* High labor turnover
* An increase in the number of "near misses" which could have resulted in injuries or illnesses
* A recent upswing in your actual accident experience
* High injury or illness incidence
* Expansion of operations or new employment
* A change in your process, or a new process with new equipment
* Employee requests for ear plugs, respirators or other protective devices
* Repeated questioning by employees seeking answers which may seem obvious to you

point 5: safety and health recordkeeping

No operation can be successful without adequate recordkeeping. They enable the employer to learn from past experience and to make corrections for future operations. Records of accidents, related injuries, illnesses, and property losses can serve the same purpose, if they are used the same way. Under Cal/OSHA recordkeeping requirements, information is gathered and stored concerning accidents that have happened. When the facts have been determined, causes can often be identified and control procedures instituted to prevent a similar illness or injury from happening again.

INJURY AND ILLNESS RECORDS

The injury and illness recordkeeping requirements under Cal/OSHA require a minimum amount of paperwork. These records will provide you with one measure for evaluating the success of your safety and health activities: success would generally mean a lack of, or a reduced number of, employee injuries or illnesses during a calendar year.

There are five important steps required by the Cal/OSHA recordkeeping system:

1. Obtain a report on every injury or illness requiring medical treatment.
2. Record each injury or illness on the Cal/OSHA Log and Summary of Occupational Injuries and Illnesses, Cal/OSHA Form No. 200, according to the instructions provided.
3. Prepare a supplementary record of occupational injuries and illnesses on recordable cases on OSHA Form No. 101 or workers' compensation reports (Form 5020, etc.) giving the same information.
4. Every year, prepare the summary Cal/OSHA Form No. 200, post it no later than February 1, and keep it posted until March 1 where employees can see it.
5. Maintain the last five years of these records in your files.

During the year, periodically review these records to see where your injuries and illnesses are occurring and in what numbers. Look for any patterns or repeat situations. These records can help you identify hazardous areas in

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your workplace and pinpoint where immediate corrective action is needed.

Even better, since the basic Cal/OSHA records include only reportable injuries and illnesses, you might consider expanding your system to include all "incidents", including those where no injury or illness resulted. Such information will assist you in pinpointing unsafe conditions and/or procedures.

EXPOSURE RECORDS AND OTHERS

The injury and illness records may not be the only records you will need to maintain. Certain Cal/OSHA standards which deal with toxic substances and hazardous exposures require records of employee exposure to these substances and sources, physical examination reports, employment records, etc.

Employers using any of the regulated carcinogens have additional reporting and recordkeeping requirements.

DOCUMENTATION ON YOUR ACTIVITIES

Essential records, including those legally required for workers' compensation, insurance audits, and government inspections must be maintained for as long as the actual need exists.

Keeping written records of your activities, such as of policy statements, training sessions for management and employees, safety and health meetings held, information distributed to employees, medical arrangements made, etc., is strongly suggested. These records will also afford an efficient means for reviewing your current safety and health activities for better control of your operations and to plan future improvements.

point 6: first-aid and medical assistance

California has several standards covering required medical services and first aid to protect employees. These standards require somewhat different protective measures for different types and sizes of employments. Medical services and first aid supplies must attend to the probable type of injuries and illnesses that might be expected in your particular workplace and therefore assistance from your staff or consulting physician will be helpful. You may also wish to obtain a copy of "First Aid On The Job", which is available free in both English and Spanish from your nearest district office of the Division of Occupational Safety and Health or from the Cal/OSHA Consultation Service.

point 7: employee awareness, acceptance and participation

The men and women who work for you are among the most valuable assets you have. Their safety, health, and goodwill are essential to the success of your operations. Your job as their employer is to develop a safety and health awareness that surrounds every employee on his or her job.

Here are some tips for getting employees to accept their responsibilities for job safety and health:

* First and foremost, you must be convinced you are going to have a safe and healthful workplace. If you act without conviction, the employees will sense it quickly.
* Each individual employee needs to know that you are sincerely interested in preventing injuries and illnesses.
* Try to sell the idea to your employees, and impress upon them that job safety and health is a condition of their employment. But, be reasonable and rational in your requirements.
* Get some activity started NOW. You may not be able to detect all the hazards in your operations, however, if you take immediate steps to control or eliminate those hazards identified, your employees will be aware of your concern for their safety and health.
* Display safety and health pamphlets on a workplace bulletin board; use safety-related and health-related posters and informational devices to keep awareness of these concerns constant. Change posters periodically and keep them timely.
* Get all employees involved – inspecting, detecting, suggesting, correcting. Include them in your plans and ask for suggestions and assistance.
* Let them know when they do a good job, and let them know if their work is unacceptable.

Consider forming a joint labor-management safety and health committee. This can assist you in starting a program and will help maintain interest in the program once it is started. Committees can be an excellent way of communicating safety and health information. If you have few employees, consider rotating them so all can have an active part in the safety and health program in their workplace.

point 8: accident investigation

You may wonder why accident investigation is included as an essential element of an injury and illness prevention program. Accidents do happen and whether

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they involve injuries or illnesses to employees or are limited to property or equipment damage, an accident is a signal that something is amiss.

The purpose of the accident investigation is to determine what factors, conditions, and/or practices contributed to the accident, so that proper action can be taken to prevent a recurrence. Minor incidents or close calls should also be investigated as they are a warning of potential hazards that could result in serious injuries or illness to employees in the future.

A complete accident investigation includes gathering pertinent data and making an objective evaluation of facts, statements and related information, all of which should lead to a definite plan to prevent recurrence.

To assure that meaningful data will be obtained, all management personnel should be familiar with accident investigation techniques. In particular, each line supervisor should be well versed in accident investigation procedures, as he or she will generally have the best knowledge of the work environment and be the key person in any investigations of accidents that occur.

It is essential that accidents be investigated as soon after they occur as possible. Facts will be clearer, more details remembered, and the conditions existing at the time of the accident will be easier to reconstruct.

section 3 the accident and illness prevention program



starting your voluntary activity

First you should make sure that you have available those standards applicable to your type of operation, equipment, processes, materials, etc., because these are the regulations the Division of Occupational Safety and Health uses when it inspects for compliance with the Occupational Safety and Health Act. These standards should be the base line for your own self-inspections and are useful in determining what specific changes need to be made when hazards are identified. Most places of employment come under the Cal/OSHA General Industry Safety Orders, however, if you are involved with construction or another specialized industry, you will need the standards that apply to that industry as well.



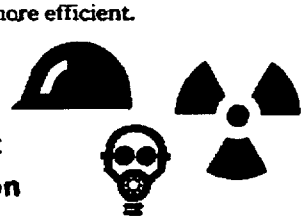
clean up your workplace

Poor housekeeping is very often a contributing factor when an accident happens, as well as a cause of low morale and sloppy work in general. Most safety action programs start with an intensive cleanup campaign in all areas of the workplace.

Get rid of any rubbish that has been collecting; make sure that proper containers are provided; see that flammables and toxic chemicals are properly stored; make sure that exits are not blocked; mark aisles and passageways, if necessary; provide adequate lighting; eliminate tripping or slipping hazards; etc.

Get everyone in on the act and impress upon them exactly what it is you want to do to make your workplace safer, more healthful, and more efficient.

start gathering specific facts about about your situation



At this point, you should take a special type of inventory. Assemble important facts about your equipment, your materials, your employees, your facilities, etc. At the start, just include whatever information is readily available on these items.

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Take it upon yourself, or perhaps assign one of your employees, to review your:

* EQUIPMENT – Make a list of your major equipment, your major operations, and the principal locations of each. Special attention should be given to inspection schedules, maintenance activities and your facilities layout.
* CHEMICALS – Make a list of all the chemicals used in your workplace, obtain material safety data sheets on all the materials used, learn about the toxic properties of the chemicals, and use the correct procedure for handling each chemical.
* EMPLOYEES' CAPABILITIES – Make an alphabetical list of all employees, showing the dates they were hired, what their jobs are, and what experience and training they have had. Special attention should be given to new employees and employees with handicaps.
* ACCIDENT AND INJURY/ILLNESS HISTORY – Take a look at your first-aid cases and workers' compensation insurance payments, and compensation awards, if any. Review any losses in the past. Determine how your insurance rate compares with others in your group. Special attention should be given to recurring accidents, types of injuries, etc.

With whatever facts you have been able to assemble easily, take a quick look to see if any major problem areas can be identified. You would be looking for such things as interruptions in your normal operations, too many employees taking too much time off, too many damaged products, etc. General assistance in this kind of problem identification can often be obtained from compensation carriers, local safety councils, business or trade associations, state agencies, your major suppliers, and even, perhaps, a competitor.

If there is a major problem, then address it specifically to see what can be done to solve the problem. Once a problem is pinpointed, the corrective action or a plan of attack can be worked on immediately. Take immediate action at this point and make a record of what you have done. Don't become overly involved in looking for major problem areas during this fact-finding stage. It is good to remember that no single hazardous situation causes all of your safety and health problems. Therefore, no single action will greatly improve your safety and health posture. If you have found no major problem at this point, don't stop here. You will need to use the self-inspection technique to be sure of your situation.

make a workplace self-inspection

The most widely accepted way to *identify* hazards is to conduct safety and health inspections. The only way you can be certain of the actual situation is to look at it from time to time.

We strongly recommend that you begin a program of self-inspection in your own workplace. Self-inspection is a must if you are to know where probable hazards exist and whether they are under proper control.

In Section 5 you will find checklists designed to assist you in this fact-finding and to give you some indication of where you should begin action to make your workplace safer and more healthful for all your employees.

These checklists are by no means all-inclusive. You should add to them or delete portions or items that do not apply to your operations. However, carefully consider each item as you come to it and then make your decision.

Don't spend time with items that obviously have no application to your operations. Make sure that each item is seen by you or your designee, and leave nothing to memory or chance. Record what you see, or don't see, and what should be done about it.

When you have completed the physical survey, add your findings to your injury information, your employee information, and your process and equipment information. You will now possess many facts that will help you determine the problems that exist.

Then, if you use the Cal/OSHA standards in your problem-solving process, it will be much easier for you to determine the action needed to solve these problems.

Once the hazards have been identified, you can institute control procedures using the Cal/OSHA standards as guidelines. These control procedures will be your basic means for preventing accidents with potential for injury, illness, and property loss. The Cal/OSHA standards can be of great assistance to you since they address controls in order of effectiveness and preference:

1. Eliminating hazards from machines, processes, material, or worksite structures.
2. Abating hazards by controlling exposures to it or guarding against it at its source.
3. Training personnel to be aware of hazards and to follow safe work practices and procedures to avoid them.
4. Prescribing signs and personal protective equipment for warning and shielding employees against hazards.

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section 4 how to obtain free assistance

Employers needing help in developing, improving or maintaining a safe and healthful employment can now obtain FREE professional assistance from the Cal/OSHA Consultation Service on any of the issues or activities described in this booklet:

Relying on cooperation rather than enforcement, Cal/OSHA consultants will help employers by:

* Identifying potential injury or illness-causing conditions in the workplace and finding workable solutions to control or eliminate them.
* Identifying kinds of help available to employers if further technical assistance is needed.
* Providing a written report summarizing the findings of any consultation visit.
* Interpreting applicable safety and health standards.
* Assisting in the establishment or improvement of worksite injury and illness prevention programs.
* Helping develop and/or conduct safety and health training of both supervisory and non-supervisory personnel.

All services of the Cal/OSHA Consultation Service are FREE upon request and are entirely separate and distinct from the enforcement activities of the Division of Occupational Safety and Health (DOSH). Consultants do not issue citations or assess penalties, and they do not inform the Division of Occupational Safety and Health about their work with an employer.

Any employer who has had a wall-to-wall survey by the Cal/OSHA Consultation Service, is participating in a voluntary compliance program, and has an effective injury and illness prevention program in operation, will have greatly reduced the likelihood of citations or penalties if inspected by the Division of Occupational Safety and Health (DOSH).

Employers with fixed worksites and having 50 or less employees at a specific worksite, will now be exempt from a routine scheduled inspection by the Division of Occupational Safety and Health, provided:

1. The employer has requested and received a wall-to-wall survey by the Cal/OSHA Consultation Service within 12 months preceding any attempt by the Division of Occupational Safety and Health (DOSH) to conduct a routine scheduled inspection.
2. The employer has corrected, or is in the process of correcting, any safety or health hazards which a consultant pointed out to the employer as a result of the wall-to-wall survey; and,
3. The employer has an effective injury and illness prevention program in operation as required by General Industry Safety Order 3203, Title 8, California Administrative Code.

Note: It should be noted that present law *requires* the Division of Occupational Safety and Health (DOSH) to conduct a "special" inspection of a workplace if it receives a formal complaint from an employee concerning possible potential hazards in the workplace; if an accident has occurred resulting in an employee's death or serious injury to five or more employees; or to follow-up on any previously cited serious violations of an occupational safety and health standard.

To obtain assistance from the Cal/OSHA Consultation Service, contact any of the offices listed below or call toll FREE from anywhere in California by dialing 800-652-1476.

SAN FRANCISCO 94102 415-557-1034
455 Golden Gate Ave.
Room 1161

SACRAMENTO 95825 916-920-6131
2424 Arden Way
Suite 90

FRESNO 93726 209-445-5072
3374 E. Shields Ave.
Suite D-21

DOWNEY 90240 213-861-9993
8535 E. Florence Ave.
Suite 200

PANORAMA CITY 91402 213-786-3870
1457 Titus Street
Suite 219

SAN DIEGO 92120 714-280-5304
6151 Fairmount Ext.
Suite 203

SAN BERNARDINO 92401 714-383-4567
303 W. Third Street

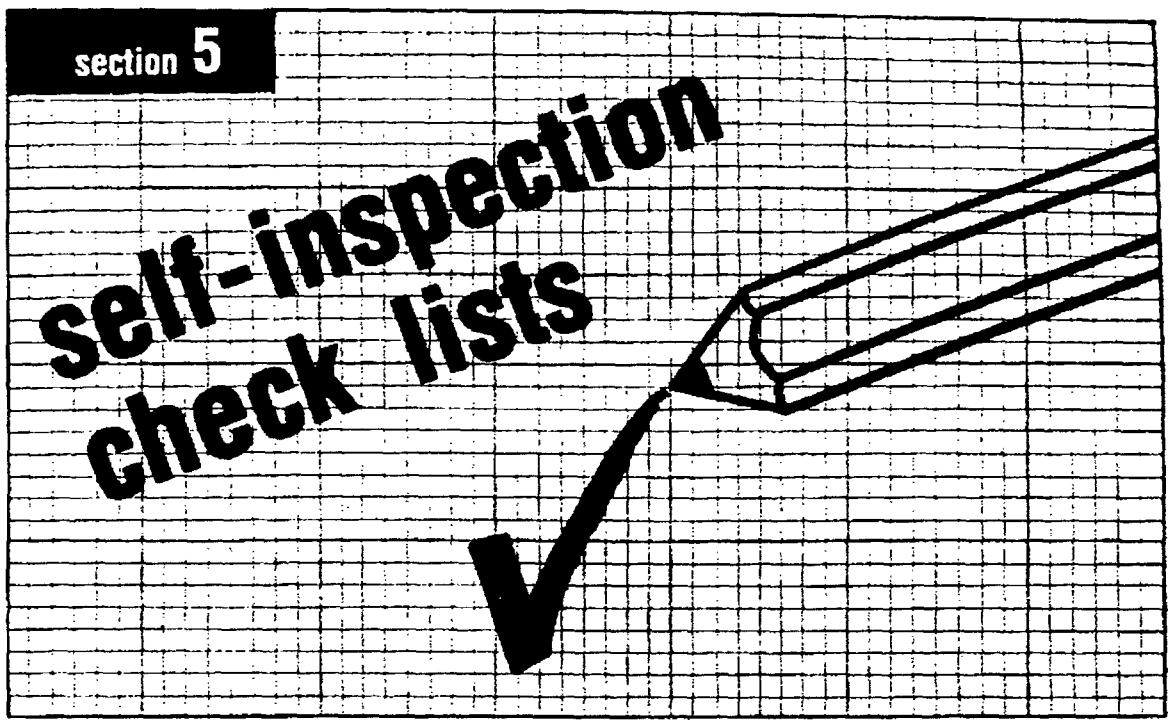
CONSULTATION SERVICE HEADQUARTERS
525 Golden Gate Ave., 2nd Floor, San Francisco 94102
(415) 557-2870

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section 5

self-inspection check lists



Note: The questions included in the self-inspection check lists are intended to serve as a general guide only, therefore employers are encouraged to develop check lists based on their own workplace needs, operations, processes, materials used or handled, and history of injuries and illnesses.

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summary of subjects included in the check lists

Employer Posting
Recordkeeping
Injury and Illness Prevention Program
Medical Services and First Aid
Fire Protection
Personal Protective Equipment & Clothing
General Work Environment
Walkways
Floor and Wall Openings
Stairs and Stairways
Elevated Surfaces
Exiting or Egress
Exit Doors
Portable Ladders
Hand Tools and Equipment
Portable (power operated) Tools & Equipment
Abrasive Wheel Equipment - Grinders
Powder Actuated Tools
Machine Guarding
Lock Out Blockout Procedures
Welding, Cutting & Brazing
Compressors and Compressed Air
Compressed Air Receivers
Compressed Gas Cylinders
Hoist and Auxiliary Equipment
Industrial Trucks - Forklifts
Spraying Operations
Entering Confined Spaces
Environmental Controls
Flammable & Combustible Materials
Toxic Substances
Chemical Exposures
Electrical
Noise
Fueling
Identification of Piping Systems
Material Handling
Transporting Employees & Materials
Control of Harmful Substances by Ventilation
Sanitizing Equipment & Clothing
Tire Inflation

employee postings

* Is the CAL/OSHA Poster "Safety and Health Protection on the Job" displayed in a prominent location where all employees are likely to see it?
* Are emergency telephone numbers posted where they can be readily found in case of emergency?
* Where employees may be exposed to any toxic substances or harmful physical agents, has appropriate information concerning employee access to medical and exposure records, and "Material Safety Data Sheets", etc., been posted or otherwise made readily available to affected employees?
* Are signs concerning "Exiting from buildings", room capacities, floor loading, exposures to x-ray, microwave, or other harmful radiation or substances posted where appropriate?
* Are other California posters properly displayed, such as:

  Industrial Welfare Commission orders regulating wages, hours, and working conditions?

  Discrimination in employment prohibited by law?

  Notice to employees of unemployment and disability insurance?

  Payday Notice?

  Summary of occupational injuries and illnesses posted in the month of February?

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recordkeeping

* Are all occupational injury or illnesses, except minor injuries requiring only first aid, being recorded as required on the Cal/OSHA Form 200?
* Are employee medical records and records of employee exposure to toxic substances or harmful physical agents up-to-date?
* Have arrangements been made to maintain required records for the legal period of time for each specific type record? (Some records must be maintained for at least 40 years.)
* Are operating permits and records up-to-date for such items as elevators, air pressure tanks, liquefied petroleum gas tanks, etc.?

injury and illness prevention program

* Do you have an active injury and illness prevention program in operation?
* Is one person clearly responsible for the overall activities of the injury and illness prevention program?
* Do you have a safety committee or group made up of management and labor representatives that meet regularly and report in writing on its activities?
* Do you have a working procedure for handling in-house employee complaints regarding safety and health?
* Are you keeping your employees advised of the successful effort and accomplishments you and/or your safety committee have made in assuring they will have a workplace that is safe and healthful?

medical services and first aid

* Do you require each employee to have a pre-employment physical examination?
* Is there a hospital, clinic, or infirmary for medical care in proximity of your workplace?
* If medical and first aid facilities are not in proximity of your workplace, is at least one employee on each shift currently qualified to render first aid?
* Are medical personnel readily available for advice and consultation on matters of employees' health?
* Are emergency phone numbers posted?
* Are first aid kits easily accessible to each work area, with necessary supplies available, periodically inspected and replenished as needed?
* Have first aid kit supplies been approved by a physician, indicating that they are adequate for a particular area or operation?
* Are means provided for quick drenching or flushing of the eyes and body in areas where corrosive liquids or materials are handled?

fire protection

* Is your local fire department well acquainted with your facilities, its location and specific hazards?
* If you have a fire alarm system, is it tested at least annually?
* If you have interior stand pipes and valves, are they inspected regularly?
* If you have outside private fire hydrants, are they flushed at least once a year and on a routine preventive maintenance schedule?
* Are fire doors and shutters in good operating condition?
* Are fire doors and shutters unobstructed and protected against obstructions, including their counterweights?
* Are fire door and shutter fusable links in place?
* Are automatic sprinkler system water control valves, air and water pressures checked weekly?
* Is the maintenance of automatic sprinkler systems assigned to responsible persons or to a sprinkler contractor?
* Are sprinkler heads protected by metal guards, when exposed to physical damage?
* Is proper clearance maintained below sprinkler heads?
* Are portable fire extinguishers provided in adequate number and type?
* Are fire extinguishers mounted in readily accessible locations?
* Are fire extinguishers recharged regularly and noted on the inspection tag?
* Are employees periodically instructed in the use of extinguishers and fire protection procedures?

personal protective equipment and clothing

* Are approved safety glasses required to be worn at all times in areas where there is a risk of eye injuries such as punctures, abrasions, contusions or burns?

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* Are protective goggles or face shields provided and worn where there is any danger of flying particles or corrosive materials?
* Are employees who need corrective lenses (glasses or contacts) in working environments having harmful exposures, required to wear *only* approved safety glasses, protective goggles, or use other medically approved precautionary procedures?
* Are protective gloves, aprons, shields, or other means provided against cuts, corrosive liquids and chemicals?
* Are hard hats provided and worn where danger of falling objects exists?
* Are hard hats inspected periodically for damage to the shell and suspension system?
* Is appropriate foot protection required where there is the risk of foot injuries from hot, corrosive, poisonous substances, falling objects, crushing or penetrating actions?
* Are approved respirators provided for regular or emergency use where needed?
* Is all protective equipment maintained in a sanitary condition and ready for use?
* Do you have eye wash facilities and a quick Drench Shower within the work area where employees are exposed to injurious corrosive materials?
* Where special equipment is needed for electrical workers, is it available?
* When lunches are eaten on the premises, are they eaten in areas where there is no exposure to toxic materials or other health hazards?
* Is protection against the effects of occupational noise exposure provided when sound levels exceed those of the Cal/OSHA noise standard?
* Are adequate work procedures, protective clothing and equipment provided and used when cleaning up spilled toxic or otherwise hazardous materials or liquids?

■ general work environment

* Are all worksites clean and orderly?
* Are work surfaces kept dry or appropriate means taken to assure the surfaces are slip-resistant?
* Are all spilled materials or liquids cleaned up immediately?
* Is combustible scrap, debris and waste stored safely and removed from the worksite promptly?
* Are accumulations of combustible dust routinely removed from elevated surfaces including the overhead structure of buildings, etc.?
* Is combustible dust cleaned up with a vacuum system to prevent the dust going into suspension?
* Is metallic or conductive dust prevented from entering or accumulating on or around electrical enclosures or equipment?
* Are covered metal waste cans used for oily and paint-soaked waste?
* Are all oil and gas fired devices equipped with flame failure controls that will prevent flow of fuel if pilots or main burners are not working?
* Are paint spray booths, dip tanks, etc., cleaned regularly?
* Are the minimum number of toilets and washing facilities provided?
* Are all toilets and washing facilities clean and sanitary?
* Are all work areas adequately illuminated?
* Are pits and floor openings covered or otherwise guarded?

■ walkways

* Are aisles and passageways kept clear?
* Are aisles and walkways marked as appropriate?
* Are wet surfaces covered with non-slip materials?
* Are holes in the floor, sidewalk or other walking surface repaired properly, covered or otherwise made safe?
* Is there safe clearance for walking in aisles where motorized or mechanical handling equipment is operating?
* Are materials or equipment stored in such a way that sharp projectives will not interfere with the walkway?
* Are spilled materials cleaned up immediately?
* Are changes of direction or elevations readily identifiable?
* Are aisles or walkways that pass near moving or operating machinery, welding operations or similar operations arranged so employees will not be subjected to potential hazards?
* Is adequate headroom provided for the entire length of any aisle or walkway?
* Are standard guardrails provided wherever aisle or walkway surfaces are elevated more than 30 inches above any adjacent floor or the ground?
* Are bridges provided over conveyors and similar hazards?

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floors and wall openings

* Are floor openings guarded by a cover, a guardrail, or equivalent on all sides (except at entrance to stairways or ladders)?
* Are toeboards installed around the edges of permanent floor opening (where persons may pass below the opening)?
* Are skylight screens of such construction and mounting that they will withstand a load of at least 200 pounds?
* Is the glass in windows, doors, glass walls, etc., which are subject to human impact of sufficient thickness and type for the condition of use?
* Are grates or similar type covers over floor openings such as floor drains, of such design that foot traffic or rolling equipment will not be affected by the grate spacing?
* Are unused portions of service pits and pits not actually in use either covered or protected by guardrails or equivalent?
* Are manhole covers, trench covers and similar covers, plus their supports designed to carry a truck rear axle load of at least 20,000 pounds when located in roadways and subject to vehicle traffic?
* Are floor or wall openings in fire resistive construction provided with doors or covers compatible with the fire rating of the structure and provided with self closing feature when appropriate?

stairs and stairways

* Are standard stair rails or handrails on all stairways having four or more risers?
* Are all stairways at least 22 inches wide?
* Do stairs have at least a 7-foot overhead clearance?
* Do stairs angle no more than 50 and no less than 30 degrees?
* Are stairs of hollow-pan type treads and landings filled to noising level with solid material?
* Are step risers on stairs uniform from top to bottom, with no riser spacing greater than 7½ inches?
* Are steps on stairs and stairways designed or provided with a surface that renders them slip resistant?
* Are stairway handrails located between 30 and 34 inches above the leading edge of stair treads?
* Do stairway handrails have at least 1½ inches of clearance between the handrails and the wall or surface they are mounted on?
* Are stairway handrails capable of withstanding a load of 200 pounds, applied in any direction?
* Where stairs or stairways exit directly into any area where vehicles may be operated, are adequate barriers and warnings provided to prevent employees stepping into the path of traffic?
* Do stairway landings have a dimension measured in the direction of travel, at least equal to the width of the stairway?
* Is the vertical distance between stairway landings limited to 12 feet or less?
* Is a stairway provided to the roof of each building four or more stories in height, provided the roof slope is 4 in 12 or less?

elevated surfaces

* Are signs posted, when appropriate, showing the elevated surface load capacity?
* Are surfaces elevated more than 30 inches above the floor or ground provided with standard guardrails?
* Are all elevated surfaces (beneath which people or machinery could be exposed to falling objects) provided with standard 4-inch toeboards?
* Is a permanent means of access and egress provided to elevated storage and work surfaces?
* Is required headroom provided where necessary?
* Is material on elevated surfaces piled, stacked or racked in a manner to prevent it from tipping, falling, collapsing, rolling or spreading?
* Are dock boards or bridge plates used when transferring materials between docks and trucks or rail cars?

exiting - egress

* Are all exits marked with an exit sign and illuminated by a reliable light source?
* Are the directions to exits, when not immediately apparent, marked with visible signs?
* Are doors, passageways or stairways, that are neither exits nor access to exits and which could be mistaken for exits, appropriately marked "NOT AN EXIT", "TO BASEMENT", "STOREROOM", etc.?
* Are exit signs provided with the word "EXIT" in lettering at least 5 inches high and the stroke of the lettering at least ½ inch wide?

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* Are exit doors side-hinged?
* Are all exits kept free of obstructions?
* Are at least two means of egress provided from elevated platforms, pits or rooms where the absence of a second exit would increase the risk of injury from hot, poisonous, corrosive, suffocating, flammable, or explosive substances?
* Are there sufficient exits to permit prompt escape in case of emergency?
* Are special precautions taken to protect employees during construction and repair operations?
* Is the number of exits from each floor of a building and the number of exits from the building itself, appropriate for the building occupancy load?
* Are exit stairways which are required to be separated from other parts of a building, enclosed by at least one-hour fire-resistive construction?
* When ramps are used as part of required exiting from a building, is the ramp slope limited to 1 ft. vertical and 8 ft. horizontal?
* Where exiting will be through frameless glass door, glass exit doors, storm doors, etc., are the doors fully tempered and meet the safety requirements for human impact?

■ exit doors

* Are doors which are required to serve as exits designed and constructed so that the way of exit travel is obvious and direct?
* Are windows which could be mistaken for exit doors, made inaccessible by means of barriers or railings?
* Are exit doors openable from the direction of exit travel without the use of a key or any special knowledge or effort when the building is occupied?
* Is a revolving, sliding or overhead door prohibited from serving as a required exit door?
* Where panic hardware is installed on a required exit door, will it allow the door to open by applying a force of 15 pounds or less in the direction of the exit traffic?
* Are doors on cold storage rooms provided with an inside release mechanism which will release the latch and open the door even if it's padlocked or otherwise locked on the outside?
* Where exit doors open directly onto any street, alley or other area where vehicles may be operated, are adequate barriers and warnings provided to prevent employees stepping into the path of traffic?
* Are doors that swing in both directions and are located between rooms where there is frequent traffic, provided with viewing panels in each door?

■ portable ladders

* Are all ladders maintained in good condition, joints between steps and side rails tight, all hardware and fittings securely attached and moveable parts operating freely without binding or undue play?
* Are non-slip safety feet provided on each ladder?
* Are ladder rungs and steps free of grease and oil?
* Is it prohibited to place a ladder in front of doors opening toward the ladder except when the door is blocked open, locked or guarded?
* Is it prohibited to place ladders on boxes, barrels, or other unstable bases to obtain additional height?
* Are employees instructed to face the ladder when ascending or descending?
* Are employees prohibited from using ladders that are broken, missing steps, rungs, or cleats, broken side rails or other faulty equipment?
* Are employees instructed not to use the top step of ordinary stepladders as a step?
* When portable rung ladders are used to gain access to elevated platforms, roofs, etc., does the ladder always extend at least 3 feet above the elevated surface?
* Is it required that when portable rung or cleat type ladders are used, the base is so placed that slipping will not occur, or it is lashed or otherwise held in place?
* Are portable metal ladders legibly marked with signs reading "CAUTION" - Do Not Use Around Electrical Equipment" or equivalent wording?
* Are employees prohibited from using ladders as guys, braces, skids, gin poles, or for other than their intended purposes?
* Are employees instructed to only adjust extension ladders while standing at a base (not while standing on the ladder or from a position above the ladder)?
* Are metal ladders inspected for tears and signs of corrosion?
* Are the rungs of ladders uniformly spaced at 12 inches, center to center?

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■ portable hand tools and equipment

* Are all tools and equipment (both company and employee-owned) used by employees at their workplace in good condition?
* Are hand tools such as chisels, punches, etc. which develop mushroomed heads during use, reconditioned or replaced as necessary?
* Are broken or fractured handles on hammers, axes and similar equipment replaced promptly?
* Are worn or bent wrenches replaced regularly?
* Are appropriate handles used on files and similar tools?
* Are employees made aware of the hazards caused by faulty or improperly used hand tools?
* Are appropriate safety glasses, face shields, etc. used while using hand tools or equipment which might produce flying materials or be subject to breakage?
* Are jacks checked periodically to assure they are in good operating condition?
* Are tool handles wedged tightly in the head of all tools?
* Are tool cutting edges kept sharp so the tool will move smoothly without binding or skipping?
* Are tools stored in dry, secure location where they won't be tampered with?
* Is eye and face protection used when driving hardened or tempered spuds or nails?

■ portable (power-operated) tools and equipment

* Are grinders, saws and similar equipment provided with appropriate safety guards?
* Are power tools used with the correct shield, guard, or attachment, recommended by the manufacturer?
* Are portable circular saws equipped with guards above and below the base shoe?
* Are circular saw guards checked to assure they are not wedged up, thus leaving the lower portion of the blade unguarded?
* Are rotating or moving parts of equipment guarded to prevent physical contact?
* Are all cord-connected, electrically-operated tools and equipment effectively grounded or of the approved double insulated type?
* Are effective guards in place over belts, pulleys, chains, sprockets, on equipment such as concrete mixers, air compressors, etc.?
* Are portable fans provided with full guards or screens having openings ½ inch or less?
* Is hoisting equipment available and used for lifting heavy objects, and are hoist ratings and characteristics appropriate for the task?
* Are ground-fault circuit interrupters provided on all temporary electrical 15 and 20 ampere circuits, used during periods of construction?
* Are pneumatic and hydraulic hoses on power-operated tools checked regularly for deterioration or damage?

■ abrasive wheel equipment (grinders)

* Is the work rest used and kept adjusted to within ⅛ inch of the wheel?
* Is the adjustable tongue on the top side of the grinder used and kept adjusted to within ¼ inch of the wheel?
* Do side guards cover the spindle, nut, and flange and 75 percent of the wheel diameter?
* Are bench and pedestal grinders permanently mounted?
* Are goggles or face shields always worn when grinding?
* Is the maximum RPM rating of each abrasive wheel compatible with the RPM rating of the grinder motor?
* Are fixed or permanently mounted grinders connected to their electrical supply system with metallic conduit or other permanent wiring method?
* Does each grinder have an individual on and off control switch?
* Is each electrically operated grinder effectively grounded?
* Before new abrasive wheels are mounted, are they visually inspected and ring tested?
* Are dust collectors and powered exhausts provided on grinders used in operations that produce large amounts of dust?
* Are splash guards mounted on grinders that use coolant to prevent the coolant reaching employees?
* Is cleanliness maintained around grinders?

■ powder-actuated equipment

* Are employees who operate powder-actuated tools trained in their use and carry a valid operators card?
* Do the powder-actuated tools being used have written approval of the Division of Occupational Safety and Health?

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* Is each powder-actuated tool stored in its own locked container when not being used?
* Is a sign at least 7 inches by 10 inches with bold face type reading "POWDER-ACTUATED TOOL IN USE" conspicuously posted when the tool is being used?
* Are powder-actuated tools left unloaded until they are actually ready to be used?
* Are powder-actuated tools inspected for obstructions or defects each day before use?
* Do powder-actuated tool operators have and use appropriate personal protective equipment such as hard hats, safety goggles, safety shoes and ear protectors?

machine guarding

* Is there a training program to instruct employees on safe methods of machine operation ?
* Is there adequate supervision to ensure that employees are following safe machine operating procedures?
* Is there a regular program of safety inspection of machinery and equipment?
* Is all machinery and equipment kept clean and properly maintained?
* Is sufficient clearance provided around and between machines to allow for safe operations, set up and servicing, material handling and waste removal?
* Is equipment and machinery securely placed and anchored, when necessary to prevent tipping or other movement that could result in personal injury?
* Is there a power shut-off switch within reach of the operator's position at each machine?
* Can electric power to each machine be locked out for maintenance, repair, or security?
* Are the noncurrent-carrying metal parts of electrically operated machines bonded and grounded?
* Are foot-operated switches guarded or arranged to prevent accidental actuation by personnel or falling objects?
* Are manually operated valves and switches controlling the operation of equipment and machines clearly identified and readily accessible?
* Are all emergency stop buttons colored red?
* Are all pulleys and belts that are within 7 feet of the floor or working level properly guarded?
* Are all moving chains and gears properly guarded?
* Are splash guards mounted on machines that use coolant to prevent the coolant from reaching employees?
* Are methods provided to protect the operator and other employees in the machine area from hazards created at the point of operation, ingoing nip points, rotating parts, flying chips, and sparks?
* Are machinery guards secure and so arranged that they do not offer a hazard in their use?
* If special handtools are used for placing and removing material, do they protect the operator's hands?
* Are revolving drums, barrels, and containers guarded by an enclosure that is interlocked with the drive mechanism, so that revolution cannot occur unless the guard enclosure is in place?
* Do arbors and mandrels have firm and secure bearings and are they free from play?
* Are provisions made to prevent machines from automatically starting when power is restored after a power failure or shutdown?
* Are machines constructed so as to be free from excessive vibration when the largest size tool is mounted and run at full speed?
* If machinery is cleaned with compressed air, is air pressure controlled and personal protective equipment or other safeguards utilized to protect operators and other workers from eye and body injury?
* Are fan blades protected with a guard having openings no larger than ½ inch, when operating within 7 feet of the floor?
* Are saws used for ripping, equipped with anti-kick back devices and spreaders?
* Are radial arm saws so arranged that the cutting head will gently return to the back of the table when released?

lock-out block out procedures

* Is all machinery or equipment capable of movement, required to be deenergized or disengaged and blocked or locked-out during cleaning, servicing, adjusting or setting up operations, whenever possible?
* Where the power disconnecting means for equipment does not also disconnect the electrical control circuit:

  Are the appropriate electrical enclosures identified?

  Is means provided to assure the control circuit can also be disconnected and locked-out?

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* Is the locking-out of control circuits in lieu of locking-out main power disconnects prohibited?
* Are all equipment control valve handles provided with a means for locking-out?
* Does the lock-out procedure require that stored energy (mechanical, hydraulic, air, etc.) be released or blocked before equipment is locked-out for repairs?
* Are appropriate employees provided with individually keyed personal safety locks?
* Are employees required to keep personal control of their key(s) while they have safety locks in use?
* Is it required that only the employee exposed to the hazard, place or remove the safety lock?
* Is it required that employees check the safety of the lock-out by attempting a start up after making sure no one is exposed?
* Are employees instructed to always push the control circuit stop button prior to re-energizing the main power switch?
* Is there a means provided to identify any or all employees who are working on locked-out equipment by their locks or accompanying tags?
* Are a sufficient number of accident preventive signs or tags and safety padlocks provided for any reasonably foreseeable repair emergency?
* When machine operations, configuration or size requires the operator to leave his or her control station to install tools or perform other operations, and that part of the machine could move if accidentally activated, is such element required to be separately locked or blocked out?
* In the event that equipment or lines cannot be shut down, locked-out and tagged, is a safe job procedure established and rigidly followed?

welding, cutting, and brazing

* Are only authorized and trained personnel permitted to use welding, cutting or brazing equipment?
* Does each operator have a copy of the appropriate operating instructions and are they directed to follow them?
* Are compressed gas cylinders regularly examined for obvious signs of defects, deep rusting, or leakage?
* Is care used in handling and storage of cylinders, safety valves, relief valves, etc., to prevent damage?
* Are precautions taken to prevent the mixture of air or oxygen with flammable gases, except at a burner or in a standard torch?
* Are only approved apparatus (torches, regulators, pressure-reducing valves, acetylene generators, manifolds) used?
* Are cylinders kept away from sources of heat?
* Are the cylinders kept away from elevators, stairs, or gangways?
* Is it prohibited to use cylinders as rollers or supports?
* Are empty cylinders appropriately marked and their valves closed?
* Are signs reading: DANGER--NO SMOKING, MATCHES, OR OPEN LIGHTS, or the equivalent, posted?
* Are cylinders, cylinder valves, couplings, regulators, hoses, and apparatus kept free of oily or greasy substances?
* Is care taken not to drop or strike cylinders?
* Unless secured on special trucks, are regulators removed and valve-protection caps put in place before moving cylinders?
* Do cylinders without fixed hand wheels have keys, handles, or non-adjustable wrenches on stem valves when in service?
* Are liquefied gases stored and shipped valve-end up with valve covers in place?
* Are provisions made to never crack a fuel-gas cylinder valve near sources of ignition?
* Before a regulator is removed, is the valve closed and gas released from the regulator?
* Is red used to identify the acetylene (and other fuel-gas) hose, green for oxygen hose, and black for inert gas and air hose?
* Are pressure-reducing regulators used only for the gas and pressures for which they are intended?
* Is open circuit (No Load) voltage of arc welding and cutting machines as low as possible and not in excess of the recommended limits?
* Under wet conditions, are automatic controls for reducing no load voltage used?
* Is grounding of the machine frame and safety ground connections of portable machines checked periodically?
* Are electrodes removed from the holders when not in use?
* Is it required that electric power to the welder be shut off when no one is in attendance?
* Is suitable fire extinguishing equipment available for instant use?

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* Is the welder forbidden to coil or loop welding electrode cable around his body?
* Are wet machines thoroughly dried and tested before being used?
* Are work and electrode lead cables frequently inspected for wear and damage, and replaced when needed?
* Do means for connecting cable lengths have adequate insulation?
* When the object to be welded cannot be moved and fire hazards cannot be removed, are shields used to confine heat, sparks, and slag?
* Are fire watchers assigned when welding or cutting is performed in locations where a serious fire might develop?
* Are combustible floors kept wet, covered by damp sand, or protected by fire-resistant shields?
* When floors are wet down, are personnel protected from possible electrical shock?
* When welding is done on metal walls, are precautions taken to protect combustibles on the other side?
* Before hot work is begun, are used drums, barrels, tanks, and other containers so thoroughly cleaned that no substances remain that could explode, ignite, or produce toxic vapors?
* Is it required that eye protection helmets, hand shields and goggles meet appropriate standards?
* Are employees exposed to the hazards created by welding, cutting, or brazing operations protected with personal protective equipment and clothing?
* Is a check made for adequate ventilation in and where welding or cutting is performed?
* When working in confined places are environmental monitoring tests taken and means provided for quick removal of welders in case of an emergency?

compressors and compressed air

* Are compressors equipped with automatic, temperature-activated shutoff mechanisms, or with fusible plugs installed in the compressor discharge lines as near the compressor as possible?
* Are compressors equipped with automatic pressure release valves, pressure gauges, and drain valves?
* Are compressor air intakes installed and equipped so as to ensure that only clean uncontaminated air enters the compressor?
* Are air filters installed on the compressor intake?
* Are compressors operated and lubricated in accordance with the manufacturer's recommendations?
* Are safety devices on compressed air systems checked frequently?
* Before any repair work is done on the pressure system of a compressor, is the pressure bled off and the system locked-out?
* Are signs posted to warn of the automatic starting feature of the compressors?
* Is the belt drive system totally enclosed to provide protection for the front, back, top, and sides?
* Is it strictly prohibited to direct compressed air towards a person?
* Are employees prohibited from using highly compressed air for cleaning purposes?
* If compressed air is used for cleaning off clothing, is the pressure reduced to less than 10 psi?
* When using compressed air for cleaning, do employees wear protective chip guarding and personal protective equipment?
* Are safety chains or other suitable locking devices used at couplings of all high pressure hose lines of ¾ inch inside diameter or larger, and lines of smaller size, where a connection failure would create a hazard?
* Before compressed air is used to empty containers of liquid, is the safe working pressure of the container checked?
* When compressed air is used with abrasive blast cleaning equipment, is the operating valve a type that must be held open manually?
* When compressed air is used to inflate auto tires, is a clip-on chuck and an inline regulator preset to 40 psi required?
* Is it prohibited to use compressed air to clean up or move combustible dust if such action could cause the dust to be suspended in the air and cause a fire or explosion hazard?

compressed air receivers

* Is every receiver equipped with a pressure gauge and with one or more automatic, spring-loaded safety valves?
* Is the total relieving capacity of the safety valve capable of preventing pressure in the receiver from exceeding the maximum allowable working pressure of the receiver by more than 10%?
* Is every air receiver provided with a drain pipe and valve

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at the lowest point for the removal of accumulated oil and water?

* Are compressed air receivers periodically drained of moisture and oil?
* Does each compressed air receiver have an inspection opening for internal inspections?
* Are all air receivers periodically inspected externally for corrosion, dents, etc.?
* Are all safety valves tested frequently and at regular intervals to determine whether they are in good operating condition?
* Is each compressed air receiver inspected internally at least once a year by a qualified inspector?
* Are the external surfaces of air receivers kept free of oil and dust accumulation?
* Is the inlet of air receivers and piping systems kept free of accumulated oil and carbonaceous materials?
* Have the following safety procedures been established for the internal inspection of air receivers?

  All starting and control equipment tagged and locked-out?

  The air pressure released from the vessel?

  Externally bolted manhold covers first pried loose from their seats before entirely removing all of the bolts or nuts?

  All manhold covers removed to improve ventilation?

  Tank atmosphere tested for oxygen and carbon dioxide concentrations and toxic, flammable, or combustible gases and vapors before employees are permitted to enter the tank?

  If a hazardous atmosphere is present, is respiratory equipment required to be used (supplied-air type)?

  Are employees entering the tank required to be equipped with a lifeline, and a safety watcher positioned at the tank opening?

  Are employees required to wear proper eye, face, hand, and foot protection to prevent injuries?

  Are portable electric lamps or tools, used inside the tank explosion-proof and grounded?

  After cleaning, is the inside inspected for loose scale, wiping rags, tools, or pieces of lint?

  Are new gaskets placed on the manhold covers?

compressed gas cylinders

* Are cylinders with a water weight capacity over 30 pounds, equipped with means for connecting a valve protector device, or with a collar or recess to protect the valve?
* Are cylinders legibly marked to clearly identify the gas contained?
* Are compressed gas cylinders stored in areas which are protected from external heat sources such as flame impingement, intense radiant heat, electric arcs, or high temperature lines?
* Are cylinders located or stored in areas where they will not be damaged by passing or falling objects or subject to tampering by unauthorized persons?
* Are cylinders stored or transported in a manner to prevent them creating a hazard by tipping, falling or rolling?
* Are cylinders containing liquefied fuel gas, stored or transported in a position so that the safety relief device is always in direct contact with the vapor space in the cylinder?
* Are valve protectors always placed on cylinders when the cylinders are not in use or connected for use?
* Are all valves closed off before a cylinder is moved, when the cylinder is empty, and at the completion of each job?
* Are low pressure fuel-gas cylinders checked periodically for corrosion, general distortion, cracks, or any other defect that might indicate a weakness or render it unfit for service?
* Does the periodic check of low pressure fuel-gas cylinders include a close inspection of the cylinders' bottom?

hoist and auxiliary equipment

* Is each overhead electric hoist equipped with a limit device to stop the hook travel at its highest and lowest point of safe travel?
* Will each hoist automatically stop and hold any load up to 125 percent of its rated load, if its actuating force is removed?
* Is the rated load of each hoist legibly marked and visible to the operator?
* Are stops provided at the safe limits of travel for trolley hoist?
* Are the controls of hoist plainly marked to indicate the direction of travel or motion?
* Is each cage-controlled hoist equipped with an effective warning device?

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* Are close-fitting guards or other suitable devices installed on hoist to assure hoist ropes will be maintained in the sheave groves?
* Are all hoist chains or ropes of sufficient length to handle the full range of movement for the application while still maintaining two full wraps on the drum at all times?
* Are nip points or contact points between hoist ropes and sheaves which are permanently located within seven feet of the floor, ground or working platform, guarded?
* Is it prohibited to use chains or rope slings that are kinked or twisted?
* Is it prohibited to use the hoist rope or chain wrapped around the load as a substitute, for a sling?
* Is it prohibited to carry loads over people?
* Are only employees who have been trained in the proper use of hoists allowed to operate them?

industrial trucks (forklifts) and similar equipment

* Are only trained personnel allowed to operate industrial trucks?
* Is substantial overhead protective equipment provided on high lift rider equipment?
* Are the required lift truck operating rules posted and enforced?
* Is directional lighting provided on each industrial truck that operates in an area with less than 2 foot candles per square foot of general lighting?
* Does each industrial truck have a warning horn, whistle, gong, or other device which can be clearly heard above the normal noise in the areas where operated?
* Are the brakes on each industrial truck capable of bringing the vehicle to a complete and safe stop when fully loaded?
* Will the industrial trucks' parking brake effectively prevent the vehicle from moving when unattended?
* Are industrial trucks operating in areas where flammable gases or vapors, or combustible dust or ignitable fibers may be present in the atmosphere, approved for such locations?
* Are motorized hand and hand/rider trucks so designed that the brakes are applied, and power to the drive motor shuts off when the operator releases his or her grip on the device that controls the travel?
* Are industrial trucks with internal combustion engine, operated in buildings or enclosed areas, carefully checked to ensure such operations do not cause harmful concentration of dangerous gases or fumes?

spraying operations

* Is adequate ventilation assured before spray operations are started?
* Is mechanical ventilation provided when spraying operation is done in enclosed areas?
* When mechanical ventilation is provided during spraying operations, is it so arranged that it will not circulate the contaminated air?
* Is the spray area free of hot surfaces?
* Is the spray area at least 20 feet from flames, sparks, operating electrical motors and other ignition sources?
* Are portable lamps used to illuminate spray areas suitable for use in a hazardous location?
* Is suitable respiratory equipment provided and used when appropriate during spraying operations?
* Do solvents used for cleaning have a flash point of 100°F or more?
* Are fire control sprinkler heads kept clean?
* Are "NO SMOKING" signs posted in spray areas, paint rooms, paint booths, and paint storage areas?
* Is the spray area kept clean of combustible residue?
* Are spray booths constructed of metal, masonry, or other substantial noncombustible material?
* Are spray booth floors and baffles noncombustible and easily cleaned?
* Is infrared drying apparatus kept out of the spray area during spraying operations?
* Is the spray booth completely ventilated before using the drying apparatus?
* Is the electric drying apparatus properly grounded?
* Are lighting fixtures for spray booths located outside of the booth and the interior lighted through sealed clear panels?
* Are the electric motors for exhaust fans placed outside booths or ducts?
* Are belts and pulleys inside the booth fully enclosed?
* Do ducts have access doors to allow cleaning?
* Do all drying spaces have adequate ventilation?

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entering confined spaces

* Are confined spaces required to be thoroughly emptied of any corrosive or dangerous material, such as acids or caustics, before entry?
* Are all lines to a confined space, containing inert, toxic, flammable, or corrosive materials valved off and blanked or disconnected and separated before entry?
* Is it required that all impellers, agitators, or other moving equipment inside confined spaces be locked-out if they present a hazard?
* Is either natural or mechanical ventilation provided prior to confined space entry?
* Are appropriate atmospheric tests performed to check for: oxygen deficiency, toxic substance and explosive concentrations in the confined space before entry?
* Is adequate illumination provided for the work to be performed in the confined space?
* Is the atmosphere inside the confined space periodically tested during conduct of work?
* Is there an assigned safety watch employee outside of the confined space whose sole responsibility is to watch the work in progress, sound an alarm if necessary, and render assistance?
* Is the safety watch employee appropriately trained and equipped to handle an emergency?
* Is the safety watch employee or other employees prohibited from entering the confined space without lifelines or respiratory equipment if there is any question as to the cause of an emergency?
* Is approved appropriate respiratory equipment required if the atmosphere inside the confined space cannot be made satisfactory?
* Is all portable electrical equipment used inside confined spaces either grounded and insulated, or equipped with ground fault protection?
* Before gas welding or burning is started in a confined space, are hoses checked for leaks, compressed gas bottles forbidden inside of the confined space, torches lighted only outside of the confined area and the confined area tested for an explosive atmosphere each time before a lighted torch is to be taken into the confined space?
* If employees will be using oxygen consuming equipment such as salamanders, torches, furnaces, etc., in a confined space, is sufficient air provided to assure combustion without reducing the oxygen concentration of the atmosphere below 19.5 percent by volume?
* Whenever combustion type equipment is used in a confined space, are provisions made to ensure the exhaust gases are vented outside of the enclosure?
* Is each confined space checked for decaying vegetation or animal matter which may produce methane?
* Is the confined space checked for possible industrial waste which could contain toxic properties?
* If the confined space is below the ground and near areas where motor vehicles will be operating, is it possible for vehicle exhaust or carbon monoxide to enter the space?

environmental controls

* Are all work areas properly illuminated?
* Are employees instructed in proper first aid and other emergency procedures?
* Are agents identified which may cause harm by inhalation , ingestion, skin absorption or contact?
* Are employees aware of the hazards involved with the various chemicals they may be exposed to in their work environment, such as ammonia, chlorine, epoxies, caustics, etc.?
* Is employee exposure to chemicals in the workplace kept within acceptable levels?
* Can a less harmful method or product be used?
* Is the work area's ventilation system appropriate for the work being performed?
* Are spray painting operations done in spray rooms or booths equipped with an appropriate exhaust system?
* Is employee exposure to welding fumes controlled by ventilation, use of respirators, exposure time, or other means?
* Are welders and other workers nearby provided with flash shields during welding operations?
* If forklifts and other vehicles are used in buildings or other enclosed areas, are the carbon monoxide levels kept below maximum acceptable concentration?
* Has there been a determination that noise levels in the facilities are within acceptable levels?
* Are steps being taken to use engineering controls to reduce excessive noise levels?
* Are proper precautions being taken when handling asbestos and other fibrous materials?
* Are caution labels and signs used to warn of asbestos?
* Are wet methods used, when practicable, to prevent the

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emission of airborne asbestos fibers, silica dust and similar hazardous materials?

* Is vacuuming used whenever possible rather than blowing or sweeping dust?
* Are employees prohibited from eating in areas where toxic materials are present?
* Are grinders, saws, and other machines that produce respirable dusts vented to an industrial collector or central exhaust system?
* Are all local exhaust ventilation systems designed and operating properly such as air flow and volume necessary for the application, ducts not plugged or belts slipping?
* Is personal protective equipment provided, used and maintained wherever necessary?
* Are there written standard operating procedures for the selection and use of respirators where needed?
* Are restrooms and washrooms kept clean and sanitary?
* Is all water provided for drinking, washing, and cooking potable?
* Are all outlets for water not suitable for drinking clearly identified?
* Are employees' physical capacities assessed before being assigned to jobs requiring heavy work?
* Are employees instructed in the proper manner of lifting heavy objects?
* Where heat is a problem, have all fixed work areas been provided with spot cooling or air conditioning?
* Are employees screened before assignment to areas of high heat to determine if their health condition might make them more susceptible to having an adverse reaction to heat?
* Are employees working on streets and roadways where they are exposed to the hazards of traffic, required to wear bright colored warning vest?
* Are exhaust stacks and air intakes so located that contaminated air will not be recirculated within a building or other enclosed area?
* Is equipment producing ultra-violet radiation properly shielded?

■ flammable and combustible materials

* Are combustible scrap, debris and waste materials (oily rags, etc.) stored in covered metal receptacles and removed from the worksite promptly?
* Is proper storage practiced to minimize the risk of fire including spontaneous combustion?
* Are approved containers and tanks used for the storage and handling of flammable and combustible liquids?
* Are all connections on drums and combustible liquid piping, vapor and liquid tight?
* Are all flammable liquids kept in closed containers when not in use (e.g. parts cleaning tanks, pans, etc.)?
* Are bulk drums of flammable liquids grounded and bonded to containers during dispensing?
* Do storage rooms for flammable and combustible liquids have explosion-proof lights?
* Do storage rooms for flammable and combustible liquids have mechanical or gravity ventilation?
* Is liquefied petroleum gas stored, handled, and used in accordance with safe practices and standards?
* Are no smoking signs posted on liquified petroleum gas tanks?
* Are liquefied petroleum storage tanks guarded to prevent damage from vehicles?
* Are all solvent wastes, and flammable liquids kept in fire-resistant, covered containers until they are removed from the worksite?
* Is vacuuming used whenever possible rather than blowing or sweeping combustible dust?
* Are firm separators placed between containers of combustibles or flammables, when stacked one upon another, to assure their support and stability?
* Are fuel gas cylinders and oxygen cylinders separated by distance, fire resistant barriers, etc. while in storage?
* Are fire extinguishers selected and provided for the types of materials in areas where they are to be used?

  Class A Ordinary combustible material fires.
  Class B Flammable liquid, gas or grease fires.
  Class C Energized-electrical equipment fires.

* Are appropriate fire extinguishers mounted within 75 feet of outside areas containing flammable liquids, and within 10 feet of any inside storage area for such materials?
* Are extinguishers free from obstructions or blockage?
* Are all extinguishers serviced, maintained and tagged at intervals not to exceed one year?
* Are all extinguishers fully charged and in their designated places?

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* Where sprinkler systems are permanently installed, are the nozzle heads so directed or arranged that water will not be sprayed into operating electrical switch boards and equipment?
* Are "NO SMOKING" signs posted where appropriate in areas where flammable or combustible materials are used or stored?
* Are safety cans used for dispensing flammable or combustible liquids at a point of use?
* Are all spills of flammable or combustible liquids cleaned up promptly?
* Are storage tanks adequately vented to prevent the development of excessive vacuum or pressure as a result of filling, emptying, or atmosphere temperature changes?
* Are storage tanks equipped with emergency venting that will relieve excessive internal pressure caused by fire exposure?
* Are "NO SMOKING" rules enforced in areas involving storage and use of hazardous materials?

toxic substances

* Is there a list of the toxic chemicals used in your workplace?
* If toxic materials are used in your processes, do you have a medical or biological monitoring system in operation?
* Are material safety data sheets available for all chemicals used?
* Are you familiar with the Threshold Limit Values or Permissible Exposure Limits of airborne contaminants and physical agents used in your workplace?
* Have control procedures been instituted for toxic materials, where appropriate, such as respirators, ventilation systems, handling practices, etc.?
* Whenever possible are toxic substances handled in properly designed and exhausted booths or similar locations?
* Do you use general dilution or local exhaust ventilation systems to control dusts, vapors, gases, fumes, smoke, solvents or mists which may be generated in your workplace?
* Is ventilation equipment provided for removal of contaminants from such operations as: production grinding, buffing, spray painting, and/or vapor degreasing, and is it operating properly?
* Do employees complain about dizziness, headaches, nausea, irritation, or other factors of discomfort when they use solvents or other chemicals?
* Is there a dermatitis problem? Do employees complain about dryness, irritation, or sensitization of the skin?
* If you have a respirator protection program, are your employees instructed on the correct usage and limitations of the respirators? Are the respirators NIOSH approved for this particular application? Are they regularly inspected and cleaned, sanitized and maintained?
* Have you considered the use of an industrial hygienist or environmental health specialist to evaluate your operation?
* If internal combustion engines are used, is carbon monoxide kept within acceptable levels?
* Is vacuuming used, rather than blowing or sweeping dusts whenever possible for clean-up?
* Are materials which give off toxic asphyxiant, suffocating or anesthetic fumes, stored in remote or isolated locations when not in use?

chemical exposures

* Are employees trained in the safe handling practices of hazardous chemicals such as acids, caustics, etc.?
* Are employees aware of the potential hazards involving various chemicals stored or used in the workplace such as acids, bases, caustics, epoxies, phenols, etc.?
* Is employee exposure to chemicals kept within acceptable levels?
* Are eye wash fountains and safety showers provided in areas where corrosive chemicals are handled?
* Are all containers, such as vats, storage tanks, etc. labeled as to their contents, e.g. "CAUSTICS"?
* Are all employees required to use personal protective clothing and equipment when handling chemicals (gloves, eye protection, respirators, etc.)?
* Are flammable or toxic chemicals kept in closed containers when not in use?
* Are chemical piping systems clearly marked as to their content?
* Have standard operating procedures been established and are they being followed when cleaning up chemical spills?
* Where corrosive liquids are frequently handled in open containers or drawn from storage vessels or pipe lines, is adequate means readily available for neutralizing or disposing of spills or overflows properly and safely?

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* Where needed for emergency use, are respirators stored in a convenient, clean and sanitary location?
* Are respirators intended for emergency use adequate for the various uses for which they may be needed?
* Are employees prohibited from eating in areas where toxic chemicals are present?
* Is personal protective equipment provided, used and maintained whenever necessary?
* Are there written standard operating procedures for the selection and use of respirators where needed?

electrical

* Are your workplace electricians familiar with the Cal/OSHA Electrical Safety Orders?
* Do you specify compliance with Cal/OSHA for all contract electrical work?
* Are all employees required to report as soon as practicable any obvious hazard to life or property observed in connection with electrical equipment or lines?
* Are employees instructed to make preliminary inspections and/or appropriate tests to determine what conditions exist before starting work on electrical equipment or lines?
* When electrical equipment or lines are to be serviced, maintained or adjusted, are necessary switches opened, locked-out and tagged whenever possible?
* Are portable electrical tools and equipment grounded or of the double insulated type?
* Are electrical appliances such as vacuum cleaners, polishers, vending machines, etc., grounded?
* Do extension cords being used have a grounding conductor?
* Are multiple plug adaptors prohibited?
* Are ground-fault circuit interrupters installed on each temporary 15 or 20 ampere, 120 volt AC circuit at locations where construction, demolition, modifications, alterations or excavations are being performed?
* Are all temporary circuits protected by suitable disconnecting switches or plug connectors at the junction with permanent wiring?
* Is exposed wiring and cords with frayed or deteriorated insulation repaired or replaced promptly?
* Are flexible cords and cables free of splices or taps?
* Are clamps or other securing means provided on flexible cords or cables at plugs, receptacles, tools, equipment, etc., and is the cord jacket securely held in place?
* Are all cord, cable and raceway connections intact and secure?
* In wet or damp locations, are electrical tools and equipment appropriate for the use or location or otherwise protected?
* Is the location of electrical power lines and cables (overhead, underground, underfloor, other side of walls, etc.) determined before digging, drilling or similar work is begun?
* Are metal measuring tapes, ropes, handlines or similar devices with metallic thread woven into the fabric prohibited where they could come in contact with energized parts of equipment or circuit conductors?
* Is the use of metal ladders prohibited in areas where the ladder or the person using the ladder could come in contact with energized parts of equipment, fixtures or circuit conductors?
* Are all disconnecting switches and circuit breakers labeled to indicate their use or equipment served?
* Are disconnecting means always opened before fuses are replaced?
* Do all interior wiring systems include provisions for grounding metal parts of electrical raceways, equipment and enclosures?
* Are all electrical raceways and enclosures securely fastened in place?
* Are all energized parts of electrical circuits and equipment guarded against accidental contact by approved cabinets or enclosures?
* Is sufficient access and working space provided and maintained about all electrical equipment to permit ready and safe operations and maintenance?
* Are all unused openings (including conduit knockouts) in electrical enclosures and fittings closed with appropriate covers, plugs or plates?
* Are electrical enclosures such as switches, receptacles, junction boxes, etc., provided with tight-fitting covers or plates?
* Are disconnecting switches for electrical motors in excess of two horsepower, capable of opening the circuit when the motor is in a stalled condition, without exploding? (Switches must be horsepower rated equal to or in excess the of the motor hp rating.)
* Is low voltage protection provided in the control device of motors driving machines or equipment which could cause

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probable injury from inadvertent starting?

* Is each motor disconnecting switch or circuit breaker located within sight of the motor control device?
* Is each motor located within sight of its controller or the controller disconnecting means capable of being locked in the open position or is a separate disconnecting means installed in the circuit within sight of the motor?
* Is the controller for each motor in excess of two horsepower, rated in horsepower equal to or in excess of the rating of the motor it serves?
* Are employees who regularly work on or around energized electrical equipment or lines instructed in the cardio-pulmonary resuscitation (CPR) methods?
* Are employees prohibited from working alone on energized lines or equipment over 600 volts?

■ noise

* Are there areas in the workplace where continuous noise levels exceed 85dBA?
  (To determine maximum allowable levels for intermittent or impact noise, see Title 8 CAC Section 5097.)
* Is there an ongoing preventive health program to educate employees in: safe levels of noise, exposures; effects of noise on their health; and the use of personal protection?
* Have work areas where noise levels make voice communication between employees difficult been identified and posted?
* Are noise levels being measured using a sound level meter and an octave band analyzer and records being kept?
* Have engineering controls been used to reduce excessive noise levels wherever the operation reasonably permits?
* Where engineering controls are determined to not be feasible, are administrative controls being used to minimize individual employee exposure to noise?
* Is approved hearing protective equipment (noise attenuating devices) available to every employee working in noisy areas?
* Have you tried isolating noisy machinery from the rest of your operation?
* If you use ear protectors, are employees properly fitted and instructed in their use?
* Are employees in high noise areas given periodic audiometric testing to ensure that you have an effective hearing protection system?

■ fueling

* Is it prohibited to fuel an internal combustion engine with a flammable liquid while the engine is running?
* Are fueling operations done in such a manner that likelihood of spillage will be minimal?
* When spillage occurs during fueling operations, is the spilled fuel washed away completely, evaporated, or other measures taken to control vapors before restarting the engine?
* Are fuel tank caps replaced and secured before starting the engine?
* In fueling operations is there always metal contact between the container and the fuel tank?
* Are fueling hoses of a type designed to handle the specific type of fuel?
* Is it prohibited to handle or transfer gasoline in open containers?
* Are open lights, open flames, or sparking, or arcing equipment prohibited near fueling or transfer of fuel operations?
* Is smoking prohibited in the vicinity of fueling operations?
* Are fueling operations prohibited in building or other enclosed areas that are not specifically ventilated for this purpose?
* Where fueling or transfer of fuel is done through a gravity flow system, are the nozzles of the self-closing type?

■ identification of piping systems

* When nonpotable water is piped through a facility, are outlets or taps posted to alert employees that it is unsafe and not to be used for drinking, washing or other personal use?
* When hazardous substances are transported through above ground piping, is each pipeline identified at points where confusion could introduce hazards to employees?
* When pipelines are identified by color painting, are all visible parts of the line so identified?
* When pipelines are identified by color painted bands or tapes, are the bands or tapes located at reasonable intervals and at each outlet, valve or connection?
* When pipelines are identified by color, is the color code posted at all locations where confusion could introduce hazards to employees?
* When the contents of pipelines are identified by name or

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name abbreviation, is the information readily visible on the pipe near each valve or outlet?

* When pipelines carrying hazardous substances are identified by tags, are the tags constructed of durable materials, the message carried clearly and permanently distinguishable and are tags installed at each valve or outlet?
* When pipelines are heated by electricity, steam or other external source, are suitable warning signs or tags placed at unions, valves, or other serviceable parts of the system?

material handling

* Is there safe clearance for equipment through aisles and doorways?
* Are aisleways designated, permanently marked, and kept clear to allow unhindered passage?
* Are motorized vehicles and mechanized equipment inspected daily or prior to use?
* Are vehicles shut off and brakes set prior to loading or unloading?
* Are containers of combustibles or flammables, when stacked while being moved, always separated by dunnage sufficient to provide stability?
* Are dock boards (bridge plates) used when loading or unloading operations are taking place between vehicles and docks?
* Are trucks and trailers secured from movement during loading and unloading operations?
* Are dock plates and loading ramps constructed and maintained with sufficient strength to support imposed loading?
* Are dock plates and loading ramps constructed and maintained with sufficient strength to support imposed loading?
* Are hand trucks maintained in safe operating condition ?
* Are chutes equipped with sideboards of sufficient height to prevent the materials being handled from falling off?
* Are chutes and gravity roller sections firmly placed or secured to prevent displacement?
* At the delivery end of rollers or chutes, are provisions made to brake the movement of the handled materials?
* Are pallets usually inspected before being loaded or moved?
* Are hooks with safety latches or other arrangements used when hoisting materials so that slings or load attachments won't accidentally slip off the hoist hooks?
* Are securing chains, ropes, chockers or slings adequate for the job to be performed?
* When hoisting material or equipment, are provisions made to assure no one will be passing under the suspended loads?
* Are material safety data sheets available to employees handling toxic materials?

transporting employees

* Do employees who operate vehicles on public thoroughfares have valid operator's licenses?
* When seven or more employees are regularly transported in a van, bus or truck, is the operator's license appropriate for the class of vehicle being driven?
* Is each van, bus or truck used regularly to transport employees, equipped with an adequate number of seats?
* When employees are transported by truck, are provisions provided to prevent their falling from the vehicle?
* Are vehicles used to transport employees, equipped with lamps, brakes, horns, mirrors, windshields and turn signals in good repair?
* Are transport vehicles provided with handrails, steps, stirrups or similar devices, so placed and arranged that employees can safely mount or dismount?
* Are employee transport vehicles equipped at all times with at least two reflective type flares?
* Is a full charged fire extinguisher, in good condition, with at least 4 B:C rating maintained in each employee transport vehicle?
* When cutting tools or tools with sharp edges are carried in passenger compartments of employee transport vehicles, are they placed in closed boxes or containers which are secured in place?
* Are employees prohibited from riding on top of any load which can shift, topple, or otherwise become unstable?

control of harmful substances by ventilation

* Is the volume and velocity of air in each exhaust system sufficient to gather the dusts, fumes, mists, vapors or gases to be controlled, and to convey them to a suitable point of disposal?
* Are exhaust inlets, ducts and plenums designed, constructed, and supported to prevent collapse or failure of any part of the system?
* Are clean-out ports or doors provided at intervals not to exceed 12 feet in all horizontal runs of exhaust ducts?

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* Where two or more different type of operations are being controlled through the same exhaust system, will the combination of substances being controlled, constitute a fire, explosion or chemical reaction hazard in the duct?
* Is adequate makeup air provided to areas where exhaust systems are operating?
* Is the source point for makeup air located so that only clean, fresh air, which is free of contaminates, will enter the work environment?
* Where two or more ventilation systems are serving a work area, is their operation such that one will not offset the functions of the other?

■sanitizing equipment and clothing

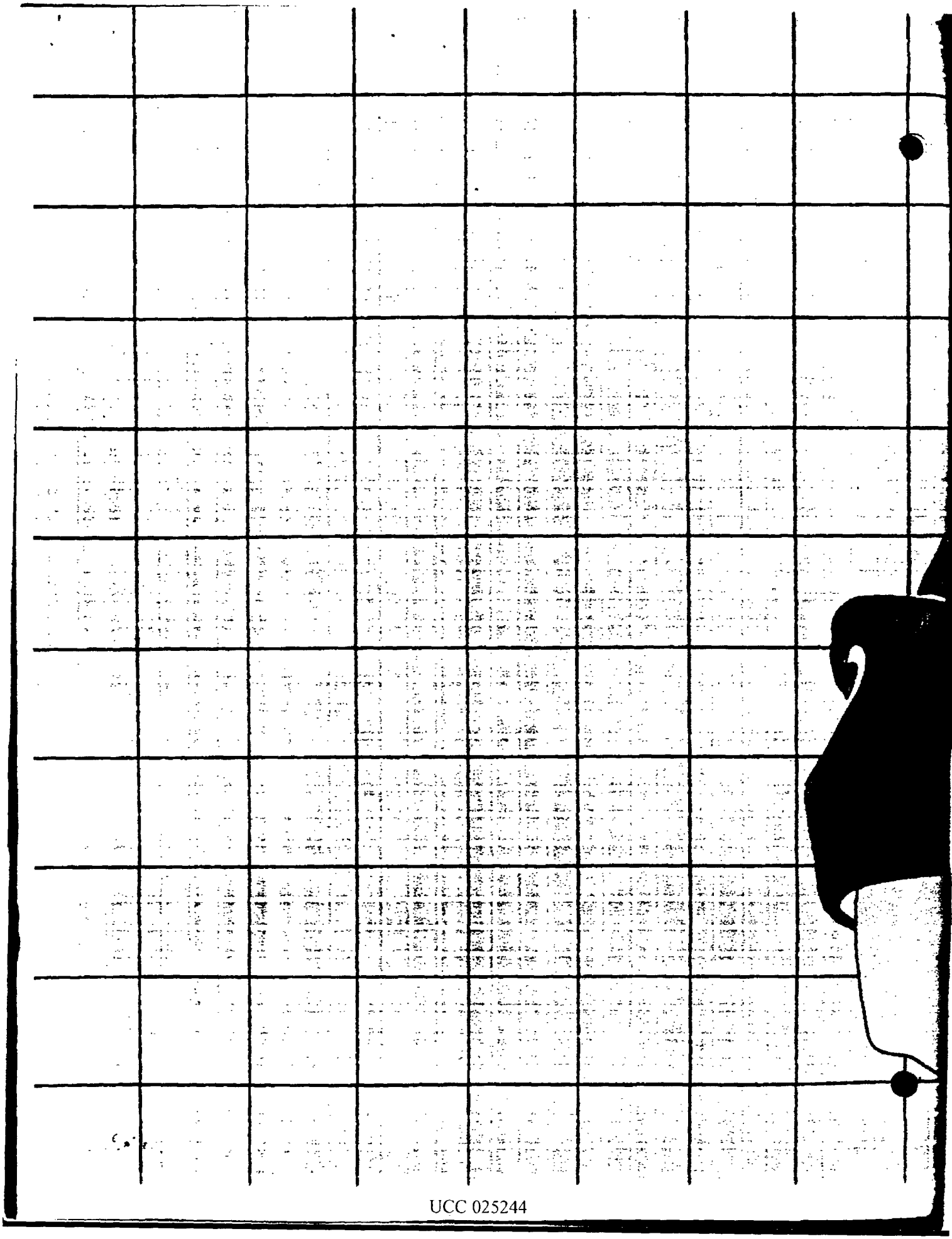
* Is personal protective clothing or equipment that employees are required to wear or use, of a type capable of being cleaned easily and disinfected?
* Are employees prohibited from interchanging personal protective clothing or equipment, unless it has been properly cleaned?
* Are machines and equipment, which processes, handles or applies materials which could be injurious to employees, cleaned and/or decontaminated before being overhauled or placed in storage?
* Are employees prohibited from smoking or eating in any area where contaminates that could be injurious if ingested are present?
* When employees are required to change from street clothing into protective clothing, is a clean change room with separate storage facility for street and protective clothing provided?
* Are employees required to shower and wash their hair as soon as possible after a known contact has occurred with a carcinogen?
* When equipment, materials, or other items are taken into or removed from a carcinogen regulated area, is it done in a manner that will not contaminate non-regulated areas or the external environment?

■tire inflation

* Where tires are mounted and/or inflated on drop center wheels, is a safe practice procedure posted and enforced?
* Where tires are mounted and/or inflated on wheels with split rims and/or retainer rings, is a safe practice procedure posted and enforced?
* Does each tire inflation hose have a clip-on chuck with at least 24 inches of hose between the chuck and an in-line hand valve and gauge?
* Does the tire inflation control valve automatically shut-off the air flow when the valve is released?
* Is a tire restraining device such as a cage, rack or other effective means used while inflating tires mounted on split rims, or rims using retainer rings?
* Are employees strictly forbidden from taking a position directly over or in front of a tire while it's being inflated?

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