

The Manager's Handbook

*A Reference for Developing a Basic Occupational Safety and Health Program for
Small Businesses*

State of Alaska
Department of Labor & Workforce Development
Division of Labor Standards & Safety
Occupational Safety & Health

This material and Safety and Health Consultation Services are provided free of charge to owners, proprietors, and managers of small businesses by the State of Alaska, Department of Labor and Workforce Development under a program funded largely by the Occupational Safety and Health Administration (OSHA), an agency of the U.S. Department of Labor.

STATE OF ALASKA
Tony Knowles, Governor

Introduction

This guide is published by the State of Alaska, Department of Labor & Workforce Development, Division of Occupational Safety and Health. Its purpose is to help you establish and maintain an effective safety and health program. It is designed particularly for the smaller business organization.

The information is based upon principles and techniques developed by national and international professionals. It is not intended as a legal interpretation of any government regulation or industry standard.

Accidents and disease at a place of employment affect both the lives of the employees and the well being of the employer's business. Occupational safety and health not only involves the technical aspects of the work in the places of employment but is also affected by individual attitudes and actions of every manager, supervisor and employee.

Section I: Basis for a Safety and Health Program

Most business owners could be perceived as risk-takers, willing to pit their business against others in a very competitive world. However, there is one gamble that is a sure loss for a business owner: a gamble on safety and the risk of accidents that cause injury or disease to employees or damage to property.

Accidents Cost Money

Safety and health organizations, small business owners and major corporations have come to realize that the actual cost of a lost workday injury is grossly underestimated. For example, consider the indirect and hidden costs of one lost workday injury:

1. Productive time lost by the injured employee;
2. Productive time lost by employees and supervisors attending the accident victim;
3. Clean-up and start-up of operations interrupted by the accident;
4. Time to hire and retrain other individuals to replace the injured employee until his or her return;
5. Time and cost for repair or replacement of any damaged equipment or materials; perhaps the cost of losing a valued customer due to poor performance or late deliver of goods and services;
6. Eroded morale among employees and perhaps lower efficiency;
7. Increase worker's compensation assessment rates;
8. Possible penalties or other sanctions applied where the injury or illness is determined to be caused by a violation of regulations; and
9. The cost of completing the paperwork generated by the accident.

It makes good business sense to reduce the costs and risks associated with accidents, whether they cause workplace injuries or illnesses or not. To do that, you must set a goal – to provide a service or produce a quality product efficiently without occupational accidents or illness. Too often that is seen as something to be considered as time permits, over and above regular business activities. To reduce risks effectively, you must address safety and health right along with production, quality control and costs. After all, the costs involved in items (1) through (9) above must come straight out of business profits.

Why a Safety and Health Program?

A “visible” safety and health program generates a safety attitude in employees. Periodic safety and health related training and inspections by those higher up in the organization help to convince the employee that the program is not merely administrative “eyewash,” but is an item of real concern. The employee gets involved. Once that occurs, employees and mid-level supervisors usually take the initiative and the program evolves into an active force within the organization. At this stage, employees subconsciously develop the habit of planning ahead and examining the safety, production, quality and cost aspects of the task before them. That is the goal. Although the physical safeguarding of the place of employment is a very real factor in occupational safety and health, the mental attitude of the employee is the ultimate key to avoiding accidents.

Plan for Safety and Health

In order to achieve this goal, you, as the employer or manager, must establish a plan for eliminating employee injury and illness and make it a part of the organization's daily operations. The plan should not only consider the organization's immediate needs, but should provide for the ongoing “long lasting employee protections.” Once the plan is designed, it must be followed through and used. As a result, the program will let you anticipate, identify and eliminate conditions or procedures that could result in injuries and illnesses.

What is a Safety and Health Program?

Safety and health programs can take many forms, any of which can be effective. For purposes of simplicity the separate steps or components of a safety and health program can be organized into the following four elements:

1. Management commitment;
2. Danger assessment and control;
3. Planning, rules, and work procedures; and
4. Training.

Each element is reviewed in detail in Section II. Section III provides step-by-step guidance in developing the program.

Section II: Four Essential Elements of a Safety and Health Program

Management Commitment

The manager's attitude toward safety and health shows in every operational decision made and action taken. Employees respond to that attitude. The manager demonstrates commitment, or lack of it, by the priority placed on the related issues.

What Constitutes Management Commitment?

Your commitment to protect employees from workplace dangers is reflected in all aspects of your safety and health program, but nowhere more than in its organization and management. To leave no doubt about your personal convictions that the subject is every bit as important as productivity and quality, you must combine safety and health with these other business functions. For example, the following kinds of actions will show employees that you are serious about creating and maintaining a safer workplace:

- 1) Set measurable objectives and goals for safety and health in the same way objectives for other business functions such as sales or productivity are set.
- 2) Assign safety and health responsibilities to staff, just as production responsibilities are assigned.
- 3) Hold supervisors and employees accountable for their safety and health responsibilities.
- 4) Allocate sufficient company resources for:
 - a) identification and control of dangers and potential dangers;
 - b) the establishment of standard operating procedures including safety and health;
 - c) the installation of engineering controls;
 - d) personal protective equipment;
 - e) employee training; and
 - f) safety and health promotion.
- 5) Establish clear lines of communication by which employees tell of their safety and health concerns;
- 6) Take every opportunity to let employees know of your concern by:
 - a) developing a written safety and health policy, signed by the senior operating manager and ensuring that it is publicized to the point where every employee is aware of it;
 - b) including related topics in meetings and conversations with employees;
 - c) taking any necessary action after inspections or accidents; and
 - d) providing feedback on safety and health performance.
- 7) Set a good example! If, for instance, a requirement for hard hats to be worn in a specific area is present, you will wear a hard hat in that area. Once management and the employees accept safety and health as essential parts of the daily business operations, along with production and quality control, a solid foundation for an effective workplace safety and health program will have been laid. From that point on, continual evidence of your concern is a primary factor in maintaining an effective program. Both employees and managers will benefit from reduced injuries and fewer lost working hours.

Danger Assessment and Control

Danger assessment and control is a vital element in the program. It is a system to identify any existing or potential dangers in the workplace, then following through to eliminate or control them. If dangers occur (or reoccur), there is a breakdown in the danger control system, and in turn the safety and health program. The danger control system also serves as the basis for developing safe work procedures and safety and health training.

Correcting or controlling dangers can be accomplished in a variety of ways. However, to work properly, a danger control system must have the following components:

- 1) An initial danger identification survey;
- 2) A system for danger identification (such as inspections at regular intervals);
- 3) An effective system for employees to report conditions which may be dangerous (such as a safety committee or a safety representative);
- 4) An equipment and maintenance program;
- 5) A system for review or investigation of workplace accidents, injuries and illnesses;
- 6) A system for initiating and tracking danger corrective actions; and
- 7) A system for periodically monitoring the place of employment.

Initial Danger Survey

A knowledgeable safety and health person should conduct the initial safety and health survey (audit) to identify existing or potential workplace dangers.

Periodic Danger Surveys (Monitoring)

Schedule a walk-through of the workplace at regular intervals to ensure that established work procedures are being followed, and those unsafe conditions or practices are identified and promptly corrected. These inspections are in addition to the everyday safety and health checks that are part of the routine duties of supervisors and managers. The frequency of the inspections depends on the type of operations, the magnitude of the dangers, the proficiency of employees and supervisors, changes in equipment or work processes, and the history of the workplace injuries and illnesses. Someone who, through experience or training, can identify actual and potential dangers and who understands safe work procedures should do an inspection.

Employee Reports of Danger

Perhaps the best source of danger information is the employees. Employees should be trained to recognize danger situations and instructed to bring them to the attention of their supervisors or to a safety committee or a safety and health representative.

Prompt attention to identify dangers and positive feedback to employees will reaffirm your personal commitment to workplace safety and health. That will encourage employees to continue to report dangers promptly and assure them that their reporting will not have negative consequences.

Equipment Maintenance Program

Equipment, particularly all safety controls and safety equipment, must be properly maintained. A program must be established to monitor the operation of workplace equipment and make sure that routine preventative maintenance is conducted. That not only makes good safety and health sense, it is good for business. Proper maintenance can prevent costly breakdowns.

Accident Investigations

A system must be established for investigating all workplace accidents, near misses, injuries and illnesses. Someone who can identify the causes and recommend corrective actions should complete the investigation system. It is important to keep records of accident investigations. They can help to determine the types of accidents that occur, where they happen, their causes and any accident trends. Such information is invaluable in preventing future accidents and may also help reveal flaws in operating procedures.

Timely Correction of Dangers

Once remedial measures to control or eliminate dangers have been agreed upon, you should make sure that they are implemented with minimum delay. Interim protection for employees may be necessary until the danger is eliminated or controlled.

Keep a record of steps taken to control or eliminate a danger. Records should contain the danger, who reported it and when who is responsible for correction, the correction target date and when it was corrected. Such information will assist in developing safe work practices and training programs.

Monitoring the Place of Employment

You have the responsibility of monitoring the workplace regularly – the work procedures, equipment and machines – to ensure that all dangers to workers are eliminated or controlled or, alternatively, to ensure that the workers are protected from exposure to the dangers.

Planning, Rules and Work Procedures

Safety and health plans should be part of every business decision, including purchasing, engineering and changes in work processes, as well as planning for emergencies that could arise. Planning for safety and health includes developing general rules for safe conduct and analyzing each job, establishing procedures for doing specific jobs safely, and a system for enforcing safety and health rules.

General Safety Rules

Your firm should have written safety and health rules that apply to everyone. The rules may be very simple or extremely complex, depending on the nature of the work processes and the number and kinds of employees involved. Some items that might be addressed by general safety rules are:

- 1) Personal protective equipment requirements;
- 2) Clothing appropriate for the work;
- 3) Behavior expected of all employees;
- 4) How to leave the workplace safely, with particular reference to emergency procedures; and
- 5) Danger areas that are “off-limits” for employees.

As part of the initial safety and health survey existing rules should be evaluated. New rules may be necessary. All rules should be reviewed and updated periodically to make sure they reflect present conditions. Those no longer applicable should be dropped.

Standard Work Procedures

Effectiveness in safety and health performance results in the employer’s commitment to establish standard work procedures that fix accountability. These directives or standard work procedures can be verbal or written but should be communicated to each worker, defining specific responsibilities and objectives where safety and health are concerned.

It is not uncommon in business operations for individual groups such as quality control, production control, safety and other groups to have their own procedures for doing the same work. The objective is to use results of a work analysis to establish one standard procedure for each job, which is on record and available for reference and continued use.

Ideas can often be obtained from equipment and tool manufacturers. It is strongly recommended that you consult with employees and use their ideas, particularly those employees who have experience in the work being studied.

Standard work procedures provide the tools for teaching how to work consistently with a maximum of efficiency and safety.

Enforcement Procedures and Systems

Safety rules and work procedures must be practiced and enforced. Establish a system to ensure that violations of rules are dealt with fairly but firmly, that all employees are aware of the requirements, and that reorientation or retraining is provided when needed. Incentive programs are useful when used in conjunction with a good enforcement program.

Emergency Procedures

Advanced planning and preparation for emergencies is good insurance. Some emergency planning is mandated by regulations, such as for first aid and fire evacuation and for certain situations in specific industries or operations. A list of possible emergencies should be prepared and procedures established to respond to the emergency. Review the plans with individuals such as doctors, fire and explosive experts or special consultants where possible. Emergency procedures should be updated whenever changes are made in materials, equipment or building structures.

Training

Safety and health training imparts knowledge, generates new ideas, reinforces existing ideas and principles and puts the other three elements of the program into action.

The answer to the question, “How do I get new employees into the mainstream and build productivity?” is “Training!” On-the-job or through formal classroom instruction, training is a necessity for improving performance. As time passes and processes or product lines change, employees must be retrained.

Safety and health training implies training on specific job procedures. It can be given separately, but it is better combined with regularly scheduled job-related training. Such training benefits the employee through fewer work-related injuries and illness reduced stress and worry caused by exposure to dangers. Training must also be provided for supervisors.

Supervisory Training

Training of supervisors is a logical first step since supervisors will help in training the other employees. Supervisors are key figures in the implementation and overall success of the safety and health program. As a minimum, supervisors must be trained in the following areas:

- 1) The need to establish and maintain safe and healthful working conditions;
- 2) The dangers associated with a job, the potential effect on employees, and the rules, procedures and work practices for controlling of these dangers;
- 3) How to relate this information by example and instruction to employees, to ensure that they understand and follow safe procedures; and
- 4) How to investigate accidents, and to take corrective and preventative action to prevent recurrence.

Employee Training

Employees may create dangers through their own actions if they have not been properly trained. Dangerous situations can be avoided, or made less dangerous if employees receive appropriate training and instruction in subjects like these:

- 1) Standard work procedures including safe work practices, and how these procedures protect against exposure to dangers.
- 2) Personal protective equipment: why it is needed, how to use it, and how to keep it in good condition.
- 3) What to do in case of fire or other emergency that may occur in the workplace.

Training is as essential to the overall program as these elements: management commitment; danger assessment and control; and, safety planning, rules and work procedures.

Section III: Your Safety and Health Program – Suggested Outline for a Safety and Health Plan

Section II described the four essential elements of any safety and health program. As owner or manager you must now concern yourself with the practical problems of putting those elements together and coming up with a program to suit the needs of the workplace. You must determine what steps are necessary then decide how and when each step should be done and who should do it.

Whether you choose to develop the program yourself or to use the expertise of an outside consultant, the following guide can be used. Experts in the field of occupational safety and health have developed this guide.

Management Commitment

- 1) Policy statement:
 - a) may include safety and health goals (objectives of the program); and
 - b) illustrates management involvement by outlining the roles and responsibilities of the employer, the supervisors and the workers.
- 2) Objective:
 - a) based on established priorities; and
 - b) should be measurable with time frames for completion.
- 3) Assignment of responsibility:
 - a) description of duties; and
 - b) establish a policy on accountability.

Danger Assessment and Control

- 1) Danger assessment and correction:
 - a) initial survey or audit;
 - b) periodic surveys and sampling;
 - c) employee reporting of dangers; and
 - d) maintain records of identified dangers and their corrections.
- 2) Accident investigations:
 - a) identification of causes and their correction;
 - b) prevention action; and
 - c) monitoring of workplace injuries and illnesses to ensure that all recommendations are being followed.
- 3) Recordkeeping – the recording of data relating to:
 - a) the nature, frequency and severity of accidents and occupational disease;
 - b) inspection reports by a regulatory agency;
 - c) other inspections;
 - d) accident investigations; and
 - e) environmental monitoring.
- 4) Equipment monitoring and maintenance program:
 - a) Production equipment; and
 - b) Personal protective equipment.

Safety Planning, Rules and Standard Work Procedures

- 1) Control of potential dangers:
 - a) with regard to equipment design, purchasing, engineering, maintenance and production.
- 2) Safety Rules:
 - a) general;
 - b) specific to tasks based on standard work procedures; and
 - c) system for informing employees.
- 3) Work procedures:

- a) analysis of tasks to develop standard work procedures which include safe work practices;
 - b) implementation;
 - c) employee involvement;
 - d) training;
 - e) reporting dangers;
 - f) enforcement of rules; and
 - g) disciplinary procedures.
- 4) Emergency procedures:
- a) first aid;
 - b) emergency medical; and
 - c) fire, evacuation.

Safety and Health Training (Initial Training and Refresher)

- 1) Supervisor:
 - a) Safety and health policy, rules and procedures
 - b) Hazards of the workplace and their control; and
 - c) Accident investigation.
- 2) Employees:
 - a) New-employee orientation;
 - b) General and specific rules;
 - c) Standard work procedures specific to the job;
 - d) Use of personal protective equipment;
 - e) Preparation for emergencies; and
 - f) Training required by regulations.

Assigning Responsibilities

The commitment and dedication of management is the key to making a safety and health program work. The next step is to decide who is the most appropriate person to manage the program. In many cases, the owner is the only likely candidate. Sometimes the plant manager or a ranking member of the management team would be the one to help develop and implement the program.

In selecting the person, consider these questions:

- Does the person have a positive attitude toward change, both personally and for the company?
- Is he or she a good team member and potential team builder?
- Can the individual communicate well?
- Will he or she be committed to the development of an effective safety and health program?
- Can this person be given the authority and resources required to get the job done?
- Does the person have enough time, or can enough time be allocated and dedicated to the program?

The success of the program hinges upon the individual chosen, and he or she cannot succeed without the manager's full cooperation and support.

Regardless of who has been selected to manage the program, the final responsibility for safety and health in the workplace rests upon the manager. To meet it, you must maintain close touch with the program and use your authority to ensure that it follows the intended course.

Getting the Program Started

In some organizations, the individual assigned to the safety and health program may have the skills, knowledge and expertise necessary to accomplish the task. However, some owners feel that a more objective assessment can be obtained from an outside source.

The evaluation of the workplace, conducted by the person responsible for the safety and health program and/or a professional consultant, consists of two major activities.

The first is a comprehensive survey or audit to identify existing or potential safety and health dangers. This initial audit includes such factors as:

- 1) Evaluation of workplace conditions with respect to mandatory requirements (regulations) as well as safety and health procedures generally accepted by the industry.
- 2) An examination of what, how and where dangerous materials are used.
- 3) Direct observations of employee work habits and practices or standard work procedures.
- 4) Discussions with employees and supervisors concerning any safety and health problems with they have experienced.

The second major activity is an assessment of any existing safety and health programs. Look at such things as:

- 1) Company policy statements;
- 2) Rules (both work and safety);
- 3) Guidelines for:
 - a) standard work procedures;
 - b) education and training;
 - c) identification and cataloguing of harmful materials;
 - d) first aid equipment and service;
 - e) medical examinations and health monitoring service;
 - f) emergency evacuation;
 - g) inspections;
 - h) records and statistics; and
 - i) accident investigations;
- 4) Training programs; and
- 5) Guidelines for monitoring the program.

Prioritizing Your Needs

It is hard to make a lot of changes in a business at one time. Improvements are more manageable if they are assigned a level of importance and done in logical order.

Priorities for correcting identified safety and health dangers can be established on the basis of severity of the danger, probability of injury or illness, time needed for correction, and the employee training.

A criterion for prioritizing correction activities can be derived from:

1. The results of the safety and health danger survey or audit.
2. A review of your company's injury and illness records.
3. Available time and resources.
4. Other factors that may affect any specific condition.

Developing an Action Plan

An action plan can serve as a "road map" to get the program from where it is now to where it should be. The action plan sets out what has to be done, the order in which to do it and who is responsible.

The action plan should be specific, yet remain flexible enough to respond to changing needs as program development proceeds.

A good action plan has two parts to it. The first is a list of the major changes or improvements needed to make the safety and health program effective. Assign each a priority and a target date for completion and identify the person who will monitor or direct a project.

The second part of an action plan involves taking each major change or improvement listed, and working out a specific plan for making the change. That means specifying what is to be accomplished, the specific steps required, who would be assigned to do what, and when the task is to be finished. Such a plan will help keep track of program improvements so that details do not slip through the cracks. When several improvements are being made at once, it is easy to overlook something that may be an important prerequisite for the next action.

Implementing Your Plan

The implementation of the action plan begins with the action step that has been assigned the highest priority.

Open communication with employees is crucial to success. Their cooperation depends on their understanding of what the safety and health program is all about, why it is important to them, and how it affects their work.

Remember that a program is a plan put into practice. The program can be kept on track by periodically checking its progress.

Reviewing Your Program

Any good management system requires a periodic review to ensure that the system is operating as intended. Every so often a careful look at each element in your safety and health program should be taken to determine what is working and what changes are needed. Identifying needed improvements provides the basis for new safety and health objectives for the coming year. Developing and implementing new action plans for those improvements will ensure continued progress towards an effective safety and health program. That, in turn, will reduce safety and health risks and increase efficiency and profit.

Safety Inspection Guide

A – Adequate at time of inspection

B – Needs immediate attention

C – Needs consideration

1. JOB SITE INFORMATION	A	B	C
a) Are OSHA and other job-site warning posters posted?			
b) Do you have safety meetings?			
c) Do you have job safety training?			
d) Are there medical services, first aid equipment, stretchers, and qualified first aid available (if needed)?			
e) Are job site injury records being kept as required by OSHA?			
f) Are emergency telephone numbers, such as police department, fire department, doctor, hospital, and ambulance posted?			
2. HOUSEKEEPING AND SANITATION			
a) Are working areas generally neat?			
b) Is waste and trash regularly disposed of?			
c) Is there an enclosed chute provided when material dropped outside of the building from over 20 feet?			
d) Is adequate lighting provided?			
e) Are projecting nails removed or bent over?			
f) Is spilled oil and grease removed?			
g) Are waste containers provided and used?			
h) Are passageways and walkways clear?			
i) Are sanitary facilities adequate and clean?			
j) Is potable water available for drinking?			
k) Are disposable drinking cups and a container for the used cups provided?			
3. FIRE PREVENTION			
a) Has a fire protection program developed?			
b) Have fire instructions been given to personnel?			
c) Are adequate fire extinguishers, identified, checked and accessible?			
d) Are phone numbers of fire department posted?			
e) Are hydrants clear and access open?			
f) Is good housekeeping being practiced?			
g) Are NO SMOKING signs posted and enforced where needed?			
h) Are temporary heating devices safe and is there adequate ventilation?			
4. ELECTRICAL INSTALLATIONS			
a) Is wiring adequate and is it well insulated and grounded, if required?			
b) Are fuses provided?			
c) Are electrical dangers posted?			
d) Are proper fire extinguishers provided?			
e) Are terminal boxes equipped with required covers?			
5. HAND TOOLS			
a) Are proper tools being used for each job?			
b) Are tools neatly stored and carried safely?			
c) Are tools inspected and maintained?			
d) Are damaged tools repaired or replaced promptly? Are employees' tools inspected and repaired?			
6. POWER TOOLS			
a) Is good housekeeping being practiced where tools are used?			
b) Are tools and cords in good condition?			
c) Are tools properly grounded?			

d) Are proper instructions in use?			
e) Are all mechanical safeguards in use?			
f) Are tools neatly stored when not in use?			
g) Is the right tool being used for the job at hand?			
h) Is wiring properly installed?			
7. POWER-ACTUATED TOOLS			
a) Are state and local laws being complied with?			
b) Are all operators licensed?			
c) Are tools and charges protected from unauthorized use?			
d) Is instruction and supervision competent?			
e) Are tools checked and in good working order?			
f) Are tools being used only on recommended materials?			
g) Are safety goggles or face shields being used?			
h) Are flying hazards checked by backing up, removal of personnel, or use of a captive stud tool?			
8. LADDERS			
a) Are ladders inspected and in good condition?			
b) Are ladders spliced?			
c) Are ladders properly secured to prevent slipping, sliding or falling?			
d) Do side rails extend 36" above the top of landing?			
e) Are job-built ladders constructed of sound adequate material?			
f) Are rungs or cleats not over 12" top to top?			
g) Are stepladders fully open when in use?			
h) Are metal ladders not used around electrical hazards?			
i) Are ladders not painted?			
j) Are ladders being properly maintained and stored?			
k) Are safety shoes in use?			
9. SCAFFOLDING			
a) Is erection of scaffolding properly supervised?			
b) Will all structural members meet the safety factors?			
c) Are all connections secured?			
d) Is scaffold tied in to the structure?			
e) Are working areas free of debris, snow, ice and grease?			
f) Are foot sills and mudsills provided?			
g) Are workers protected from falling objects?			
h) Is the scaffold plumb and square, with cross-bracing?			
i) Are guardrails, intermediate rails and toe boards in place?			
j) Is adequate, sound planking in use?			
k) Is scaffold equipment in good working order?			
l) Are ropes and cables in good condition?			
10. HOISTS, CRANES AND DERRICKS			
a) Have cables and sheaves been inspected?			
b) Are slings, chains, hooks and eyes checked?			
c) Is equipment firmly supported?			
d) Are outriggers used if needed?			
e) Are power lines inactivated, removed, or at safe distance?			
f) Is proper loading for capacity at lifting radius? Are rated load capacities posted?			
g) Is all equipment properly lubricated and maintained?			
h) Are signalmen where needed?			
i) Are signals posted, understood and observed?			
j) Are inspection and maintenance logs maintained?			
k) Are hazard signs posted visible to operator?			

11. HEAVY EQUIPMENT			
a) Is there regular inspection and maintenance?			
b) Are moving parts lubricated and repaired?			
c) Are lights, brakes, and warning signals operative?			
d) Are wheels chocked when necessary?			
e) Are haul roads well maintained and laid out properly?			
f) Are shut-off devices on air hose lines in case of hose failure?			
g) Are noise arresters in use?			
h) Are ROPS (roll-over-protections) in place?			
12. MOTOR VEHICLES			
a) Do vehicles receive regular inspection and maintenance?			
b) Are operators qualified?			
c) Are local and state vehicle laws and regulations observed?			
d) Do brakes, lights and warning devices operate properly?			
e) Are weight limits and load sizes controlled?			
f) Are personnel carried in a safe manner?			
g) Is all glass in good condition?			
h) Are back-up signals provided?			
i) Are fire extinguishers installed where required?			
j) Are slow moving vehicle signs posted?			
13. REPAIR SHOPS AND GARAGES			
a) Are fire hazards prevented?			
b) Is dispensing of fuels and lubricants done safely?			
c) Are good housekeeping practices maintained?			
d) Is lighting adequate?			
e) Are carbon monoxide dangers prevented?			
f) Are all fuels and lubricants in proper containers?			
14. BARRICADES			
a) Are floor and wall openings planked over or barricaded?			
b) Are roadways and sidewalks effectively protected?			
c) Is adequate lighting provided?			
d) Is traffic controlled?			
15. HANDLING AND STORAGE OF MATERIALS			
a) Are materials properly stored or stacked?			
b) Are passageways clear?			
c) Are stacks on firm footings and not too high?			
d) Are the proper numbers of men being utilized for each operation?			
e) Are men lifting loads correctly?			
f) Are materials protected from weather conditions?			
g) Is protection against falling into hoppers and bins being used?			
h) Is dust protection observed?			
i) Are extinguishers and other fire protection in the immediate area?			
j) Is traffic controlled in the storage area?			
16. EXCAVATION AND SHORING			
a) Are adjacent structures properly shored?			
b) Is excavation shored or cutback as required?			
c) Are roads and sidewalks supported and protected?			
d) Is material being stored a safe distance from excavation?			
e) Are excavation barricades and adequate lighting provided?			
f) Is equipment a safe distance from edge of excavation?			
g) Are ladders provided where needed?			
h) Are equipment ramps adequate?			

i) Is job supervision adequate?			
17. DEMOLITION			
a) Are operations planned ahead?			
b) Are adjacent structures being properly shored?			
c) Are material chutes used? Are floor openings for material disposal adequately barricaded?			
d) Are there sidewalk and other public protections in place?			
e) Is opening space clear for trucks and other vehicles?			
f) Are there adequate access ladders or stairs?			
18. PILE DRIVING			
a) Are proper storage procedures in place?			
b) Is unloading only by properly instructed workers?			
c) Are steam lines, slings, etc., in operating condition?			
d) Are pile-driving rigs properly supported?			
e) Are ladders on frames?			
f) Are cofferdams maintained and inspected?			
g) Is adequate pumping available?			
19. EXPLOSIVES			
a) Are qualified operators and supervision present?			
b) Are proper transport vehicles used?			
c) Are state and local laws and regulations observed?			
d) Are storage magazines constructed per regulations or as recommended?			
e) Are only experienced personnel handling explosives at all times?			
f) Are cases opened with wooden tools only?			
g) Are "No Smoking" signs posted and observed where appropriate?			
h) Are detonators tested before each shot?			
i) Are all personnel familiar with signals, and are signals properly used at all times?			
j) Are inspections performed after each shot?			
k) Is proper protection being used and are explosives accounted for at all times?			
l) Is disposition of wrappings, waste and scrap being handled properly?			
m) Are nearby residents being advised of blasting cap danger?			
n) Are radio frequency hazards being checked?			
20. FLAMMABLE GASES AND LIQUIDS			
a) Are all containers approved and clearly identified?			
b) Are proper storage practices observed?			
c) Are fire hazards checked?			
d) Are proper types and number of extinguishers nearby?			
e) Are proper methods for moving cylinders used?			
21. WELDING AND CUTTING			
a) Are operators qualified?			
b) Are screens and shield used when needed?			
c) Are goggles, welding helmet, gloves, and other protective clothing being worn?			
d) Is equipment in good operating condition?			
e) Is electrical equipment grounded?			
f) Are power cables and hoses protected and in good repair?			
g) Are fire extinguishers of proper type nearby?			
h) Are fire hazards inspected?			
i) Are flammable materials protected or removed?			
j) Are gas cylinders secured upright?			
k) Are cylinder caps in use?			
22. STEEL ERECTION			
a) Are safety nets or planked floors in use?			

b) Are hard hats, safety belts, gloves and other protective clothing being used?			
c) Are taglines for tools being used?			
d) Are fire hazards at rivet forge and welding operations being checked?			
e) Are floor openings covered or barricaded?			
f) Are ladders, stairs or other access provided?			
g) Are hoisting apparatus routinely checked?			
h) Are employees riding the ball?			
23. CONCRETE CONSTRUCTION			
a) Are forms properly installed and braced?			
b) Are shoring, plumbing and cross-bracing adequate?			
c) Is shoring left in place until strength is attained?			
d) Are proper curing procedures and timing followed?			
e) Are heating devices checked?			
f) Is mixing and transport equipment supported and traffic planned and routed?			
g) Are there adequate runways?			
h) Is adequate protection against cement dust being utilized?			
i) Are hard hats, boots and gloves being used and are shirts covering skin?			
j) Are nails bent over or removed and stripped from material removed from area?			
24. MASONRY			
a) Is proper scaffolding being used?			
b) Are masonry saws properly equipped and grounded, and dust protection provided?			
c) Is hoisting equipment safe?			
25. HIGHWAY CONSTRUCTION			
a) Are laws and ordinances observed?			
b) Are competent flagmen properly dressed, instructed and posted?			
c) Are adequate warning signs and markers being used?			
d) Is right-of-way clear and free of equipment?			
e) Is there traffic control through construction site?			
f) Are detours adequately marked and maintained?			
g) Is dust control present?			
h) Is adequate light present?			
26. PERSONAL PROTECTIVE EQUIPMENT			
a) Is eye protection being used?			
b) Are face shields being used?			
c) Are respirators and masks used?			
d) Are helmets and hoods used?			
e) Is head protection being used?			
f) Is hearing protection being used?			
g) Are gloves, aprons, sleeves (rubber or plastic, designed to afford protection from alkalis and acids) and electricians' rubber gloves and protectors being used?			