

Idaho State

U N I V E R S I T Y

SAFETY AND LOSS CONTROL MANUAL

2009

TABLE OF CONTENTS

POLICY STATEMENT OF IDAHO STATE UNIVERSITY	v
1.0 Safety Program Responsibilities.	1-1
1.1 Safety Director.	1-1
1.2 Responsibility of the Safety Director.	1-1
1.3 Responsibility of Individuals.	1-2
1.3.1 Department Heads.	1-2
1.3.2 Supervisors and Foremen.	1-2
1.3.3 Employees.	1-3
2.0 Departmental Safety Program Activities.	2-1
2.1 Supervision and Coordination of Activities.	2-1
2.2 Functions of the Departmental Safety Committee.	2-1
2.3 Safety Material.	2-2
2.4 Central Safety Committee.	2-2
3.0 Reporting of Job Injuries.	3-1
3.1 Reporting of Job Injuries by Employees.	3-1
3.2 Reporting of Job Injuries by Departments.	3-1
3.3 Verification of Statements.	3-2
4.0 Safety.	4-1
4.1 Purpose of Safety Meetings.	4-1
4.2 Scheduling the Meetings.	4-1
4.3 Grouping of Employees.	4-1
4.4 Subjects Which Should Be Covered.	4-1
4.5 Planning the Program.	4-2
4.6 Conducting the Meeting.	4-2
4.7 Attendance.	4-3
5.0 Fundamentals of Accident Prevention.	5-1
5.1 Basic Activities.	5-1
5.2 Accidents are Preventable.	5-1
5.3 Causes of Accidents.	5-1
5.4 Unsafe Acts.	5-1
5.5 Unsafe Conditions.	5-2
5.6 Control of Accident Causes.	5-3
5.7 Elimination of Unsafe Conditions.	5-4
5.8 Control of Work Habits.	5-4
5.9 Safety Orientation of New Employees.	5-6

6.0	Investigation of Accidents.	6-1
6.1	Purpose.	6-1
6.2	Cases to be Investigated.	6-1
6.3	Persons Making Investigations.	6-1
6.4	Procedures for making Investigations.	6-2
6.5	Reports of Investigation.	6-2
7.0	Safe Practices.	7-1
7.1	Personal Protective Equipment.	7-1
7.2	Hand Tools.	7-1
7.3	Prevention of Lifting Injuries.	7-2
7.4	Barricades and Warning Signs.	7-3
7.5	Good Housekeeping Practices.	7-4
7.6	Office Safety.	7-5
7.7	Specific Safety Instructions.	7-6
	7.7.1 Building Maintenance.	7-6
	7.7.2 Machinery.	7-7
	7.7.3 Hand Tools.	7-8
	7.7.4 Power Tools.	7-11
	7.7.5 Electric Hand Tools.	7-15
	7.7.6 Garage and Shop Safety.	7-15
	7.7.7 Excavations, Trenching, and Shoring.	7-18
	7.7.8 Welding.	7-20
	7.7.9 Working in Manholes.	7-25
	7.7.10 Construction Safety.	7-26
	7.7.11 Jackhammer and Portable Power Hammer Operations.	7-27
	7.7.12 Handling Chemicals.	7-28
	7.7.13 Ladder and Scaffold Safety.	7-30
	7.7.14 Fire Safety.	7-32
	7.7.15 ISU Fire Safety Policies.	7-36
	7.7.16 Fire Watch Policy.	7-38
	7.7.17 Lead Base Paint Abatement.	7-44
	7.7.18 Sewer Line Breaks or Back-ups.	7-44
8.0	Body Fluids.	8-1
9.0	Motor Vehicles.	9-1
9.1	Responsibilities of University Drivers.	9-1
	9.1.1 Driver's or Chauffeur's License.	9-1
	9.1.2 Inspection of Vehicle.	9-1
9.2	Use of University-Owned Vehicles.	9-2
9.3	Traffic Rules and Regulations.	9-5
	9.3.1 Speed Limits.	9-5

9.3.2	Stop Signs and Yield Signs.	9-5
9.3.3	Driving on Right Side of Road.	9-5
9.3.4	Overtaking and Passing Another Vehicle.	9-5
9.3.5	Limitations on Passing on the Left.	9-6
9.3.6	No-Passing Zones.	9-6
9.3.7	One-Way Streets.	9-6
9.3.8	Multiple-Lane Streets.. . . .	9-6
9.3.9	Overtaking and Passing School Buses.. . . .	9-7
9.3.10	Following Vehicles.	9-7
9.3.11	Required Position and Method of Turning.	9-7
9.3.12	Required Signals.	9-8
9.3.13	Vehicle Entering Street.	9-8
9.3.14	Approach of Emergency Vehicle.. . . .	9-8
9.3.15	Parking.	9-9
9.3.16	Prohibited Parking Places.	9-9
9.3.17	Obedience to Traffic Control Devices.. . . .	9-10
9.3.18	Traffic Control Signals.	9-10
9.3.19	Flashing Signals.. . . .	9-10
9.3.20	Backing of Vehicles.. . . .	9-11
9.4	Vehicle Accidents.	9-11
9.4.1	Definition of Vehicle Accident.	9-11
9.4.2	Procedures When Accidents Occur.	9-11
9.4.3	Accident Review Board.. . . .	9-12
9.4.4	Purpose of Accident Review Board.. . . .	9-13
9.4.5	Composition of Accident Review Board.. . . .	9-13
9.4.6	Appearance Before the Board.	9-13
9.4.7	Preventable Accident Guides.. . . .	9-14
9.4.8	Non-Preventable Accidents.	9-16
9.4.9	Determining Preventability.	9-16
9.4.10	Civil Service Employees.	9-17
10.0	Emergency Management Program.. . . .	10-1

**SAFETY POLICY STATEMENT
OF
IDAHO STATE UNIVERSITY**

It is the policy of Idaho State University that every employee is entitled to work under the safest conditions possible. To this end, every reasonable effort will be made to promote accident prevention, fire protection, and health preservation.

It is our belief that accidents which injure people, damage machinery and property, and destroy materials cause needless personal suffering, inconvenience, and problems.

We believe that practically all accidents can be prevented by taking common sense precautions.

The University will endeavor to maintain a safe and healthful work place. The University will provide safe working equipment, necessary personal protection, an emergency response plan, and, in the case of injury, provide first aid and medical services as needed.

A Safety Director will be responsible for the overall effectiveness of the University safety program. He will work with the University Safety Committee and the various department safety committees to determine the overall direction and analysis of University's safety program operations and the communication of pertinent information to all departments. He will undertake such duties as may be required in the day-to-day operation of the safety program.

It is wrong to believe that accidents are unavoidable and will always happen. If all of us do our part including acting and talking safety at all times, a healthy attitude toward accident prevention and improved safety on the job can be achieved.

1.0 Safety Program Responsibilities

The success of the University safety and loss control program (hereafter “safety program”) and department safety programs will depend upon the announced and demonstrated interest of management, the sincere and consistent example set by supervisors, and the cooperative, concerted efforts of all employees.

1.1 Safety Director

A Safety Director will develop and administer a safety program for the University employees. He will be responsible to the Facilities Services Director in matters relating to the development, administration, and management of the University safety program, and will coordinate his efforts with the University Risk Manager. However, in recognition of the importance of continuing interest and support of top management, he will have direct access to the President in all safety matters for which immediate support of top management is desirable. The Safety Director will support the chairman of the University Safety Committee.

1.2 Responsibility of the Safety Director

1. Conducting inspections of University operations and providing necessary instructions and guidance to achieve successful occupational health and safety standards adopted by Idaho State University.
2. Maintaining comprehensive records of accident experience and related costs; performing statistical analysis to determine trends, problem areas, and overall safety performance; and maintaining and evaluating all safety statistics.
3. Informing the President, the University Risk Manager, and Department Heads about the status of matters affecting the University safety program and relative performance of departments and divisions.
4. Conducting training of supervisors in safety supervision and coordinating adequate job instruction procedures and safety training of all employees.
5. Making follow-up investigations, when necessary, of accidents and injuries occurring in University work operations to determine causes and enhance the establishment of preventive measures.
6. Coordinating appropriate safety requirements for contractors’ services with the University Attorney, the University Risk Manager, and University Engineering staff.

7. Coordinating appropriate safety engineering considerations in the design of specifications for new equipment with the Purchasing Agent and heads of using departments.
8. Review and sign all new construction plans and remodel construction plans.

1.3 Responsibility of Individuals

1.3.1 Department Heads

All Department Heads are charged with the responsibility for providing the type of work environment, work procedures, and services to the public that will promote, to the greatest extent possible, the safety of University employees and the general public. They will initiate and actively support the University safety program that will integrate safety engineering principles and accident prevention techniques in all work programs and services to the public. They will:

1. Develop, publish, and enforce reasonable, practical, safety procedures pertinent to the activities conducted by the department.
2. Adequately inform all employees about safety procedures placed in effect and provide each employee with a printed copy of all such procedures that apply to him.
3. Establish and maintain a system of job safety analyses, safety inspections, accident investigation, and pertinent safety performance records.
4. Submit required accident and injury reports using standard reporting procedures outlined in national consensus standards provided by the State Insurance Fund.
5. Provide for adequate job training and continuing safety instruction of all employees under their jurisdiction.
6. Assist the Safety Coordinator to arrange and schedule appropriate training courses of supervisors and other employees and insure their availability when scheduled.

1.3.2 Supervisors and Foremen

The full potential of effective accident prevention can only be realized when supervisors cooperate without reservation in all phases of the safety program. Their close contacts with the work environment and the people performing the work make them the best qualified to translate principle into accident prevention on the job. They know the details of each job they supervise to recognize the hazardous situations. They must constantly SELL to employees the wisdom of observing safety procedures established for their work and of using the prescribed protective equipment. They must

enforce the safety procedures and rules that apply to the work they supervise. Following is a list of safety obligations of supervisors. They will:

1. Provide adequate basic job training and safety instruction to all employees.
2. Provide continuing safety instruction while issuing daily work assignments to focus attention upon potential hazards, changes in work conditions, or procedures, etc.
3. Actively support safety promotional measures.
4. Continuously observe and evaluate work conditions and work procedures to detect and correct unsafe conditions and practices.
5. Promptly investigate accidents and complete required reports.
6. Be receptive to, and encourage employees to report unsafe practices and conditions, and to submit practical suggestions for correction.
7. Participate in training courses designed to increase their professional knowledge of safety supervision principles and techniques.
8. Obtain and maintain high standards in housekeeping and personal environmental sanitation in work activities.
9. Insure that tools, equipment, and protective devices are properly maintained and properly utilized.
10. Become thoroughly familiar with and actively enforce all safety procedures applicable to the work they supervise.

1.3.3 Employees

All University employees are required as a condition of employment to develop safe work habits and to contribute in every manner possible to the safety of themselves, their co-workers, and general public. To that end, they will:

1. Obey all safety rules, policies, and procedures.
2. Become familiar with and observe approved safe work procedures for their work activities.
3. Promptly report all accidents and injuries occurring within the course of their employment to their supervisor.

4. Promptly report all unsafe practices or conditions they observe to their supervisor.
5. Cooperate with and assist in investigation of accidents to identify correctable causes and to prevent recurrence.
6. Actively support and participate in safety, promotional, and educational measures utilized in department safety programs.

2.0 Departmental Safety Program Activities

2.1 Supervision and Coordination of Activities

The heads of operating departments will coordinate the department's safety program.

The Departmental Safety Person will be responsible to the Department Head for the operation of the safety program, so far as it pertains to his department. He will also serve as chairman of the Departmental Safety Committee if applicable.

The numerical membership of a Departmental Safety Committee will depend upon the needs of the individual department.

2.2 Functions of the Departmental Safety Committee

Should departments choose a Safety Committee rather than one safety person, the successful Safety Committee helps to plan the safety program and takes part in making the program operate. These activities will be determined by the size of the Safety Committee and policies set out by the Department Head and the members of the Safety Committee. It is advisable to establish definite policies and procedures when a safety program is organized.

Suggestions or Recommendations — Procedures should be established to provide for a system of handling suggestions and recommendations that are submitted to the Safety Committee or safety person. Following is a step-by-step procedure suggested for handling recommendations:

- A. Recommendations submitted by employees or Safety Committee members.
- B. Discussion and acceptance, modification, or rejection.
- C. Accepted recommendations submitted to the Department Head. Rejected recommendations returned to the originator with reasons therefore.
- D. Department Head submits the written reply to Safety Committee or safety person regarding action taken on recommendations.
- E. Results reported to the originator of recommendation.
- F. Final reports to Safety Committee or safety person on completion of recommendation.

2.3 Safety Material

Bulletin Boards — Each operating department will procure and maintain a portion of a bulletin board which will be devoted entirely to the display of safety posters and other material relating to safety. One or more persons should be designated as responsible for posting materials received and for keeping it current. Posters will be distributed monthly to the departments.

Pamphlets and Booklets — Occasionally, departments will be furnished with a supply of safety pamphlets or booklets for distribution to all employees within the department. In many cases, the materials contained in these pamphlets are suitable subjects for presentation at safety meetings.

Safety Films — Safety films are available locally from the Red Cross or the State Department of Public Health on a loan basis without rental charge. The Safety Department can also secure free films from insurance companies; however, at **least** one month advance notice is required in order to obtain films on the date desired. The Safety Director has access to safety films from the National Safety Council.

Safety Signs — Signs pertaining to safety precautions or restrictions should be procured by the department and posted in applicable areas.

2.4 ISU Safety Committee

The ISU Safety Committee will be composed of rank and file employees. The President will appoint the Safety Committee Chairperson. The ISU Safety Committee will function as an advisory body to develop and recommend to the University administration matters of policy and procedure affecting administration of the University safety program. The Committee will meet at a mutually convenient time, at the request of a member of the Committee, but not less than once every two months. The Committee is responsible for:

1. Reviewing statistical data, records, and reports of safety matters to determine the effectiveness of overall accident and loss prevention efforts and to develop recommendations for improvement.
2. Reviewing and analyzing accident and property loss investigation reports for:
 - A. Accuracy and completeness (recommending follow-up investigation if necessary).
 - B. Provide recommendations for corrective action and provide consistency throughout the University operations.
 - C. Identification of accident problem or trend and determination of what order they should be given attention.

3. Reviewing safety and property inspection reports, job safety analyses, supervisor's safety observation reports, and employees' suggestions for:
 - A. Possible changes in work practices or procedures.
 - B. Need for safety procedures.
 - C. Need for protective device or equipment.
 - D. Need for training.
4. Planning and administering safety promotional activities.
5. Developing practical safety and property inspection procedures, and assisting in making inspections when requested by the Safety Director.
6. Keeping the Department Heads informed of the progress of each department safety program and comparative safety records of work crews or other segments of the department.
7. Assisting in developing the records and statistical data necessary to provide an accurate picture of department safety problems.

3.0 Reporting of Job Injuries

3.1 Reporting of Job Injuries by Employees

All employees, as a condition of employment, are required to report all job injuries to their supervisor as soon as possible after the injury occurs. When an employee requires medical treatment, he will first inform his immediate supervisor of the nature of the injury. It should be emphasized that this applies to all job injuries no matter how minor or whether medical treatment was required.

In addition to a verbal report to the supervisor, the injured employee is required to have a written report prepared in the departmental office, as outlined in the following paragraph. Supervisors will take follow-up action to see that injured employees have reports prepared.

3.2 Reporting of Job Injuries by Departments

First Reports of Injuries

When an injury is first reported, the injured employee will have a supervisor's report prepared as soon as possible and no later than 24-hours following the time the injury occurred. This report will be prepared for all job injuries even though medical treatment was not required. Information contained in this report is important because it provides the basis for any future legal claims that the injured employee might have in connection with the injury.

If the injured employee is too disabled to come to the department office to fill out the report, the supervisor, departmental clerk, or other person designated by the Department Head will obtain the required information and have the report prepared. It will not be delayed pending the return to work of the disabled employee.

The department concerned will be responsible for preparing the Supervisor's Report and after required signatures have been obtained, a copy will be forwarded to Human Resources and a copy to the Safety Director as soon as possible.

When medical service is required, the injured employee will go to the Human Resources Office to complete a Notice of Injury and Claim for Benefits form which will be submitted to the State Insurance Fund.

A written statement of the incident will be completed by the injured party and any witnesses when requested by investigating officials.

Subsequent Follow up Pertaining to Lost Time Injuries

If the injured employee does not return to work at the time the original attending physician stated, then a report must be given to Human Resources by telephone. Also, a verbal report must be given to Human Resources at each stage of the injured employee's recuperation, i.e., light duty, therapy, etc.

A telephone report will also be required when an injured employee who returned to work after the injury, later had to leave because he was too disabled to work. (Both A and B must be followed up in writing and sent to the Safety Director.)

When the injured employee is released to return to work, he must have a signed release from a physician before returning to his duties.

3.3 Verification of Statements

Whenever an employee claims to have been injured in the course of his employment, the State Insurance Fund is obligated to the employee for initial medical examination to determine whether or not the injury was, in fact, received as a result of employment.

When the supervisor is not an actual eyewitness to an accident resulting in an injury, he will make every effort to verify the statements of the injured employee to assure that: (1) the injury occurred on the job; and (2) circumstances described by the injured employee are correct.

If there is reason to doubt statements made by the injured employee or evidence indicates all or parts of statements are false, he should be questioned. If, however, he persists in claiming that the injury was job connected, then a Supervisor's Report must be submitted. In this case, the ISU Safety Committee will attach a memorandum to the report indicating reasons for believing that statements made by the employee are not correct.

Employees who make false statements concerning job injuries are subject to dismissal from their jobs and are liable for any compensation received or medical payments that were made.

4.0 Department Safety Meeting

4.1 Purpose of Safety Meetings

Safety meetings are an integral part of the safety program. Their function is to arouse and maintain interest in accident prevention, to develop attitudes sympathetic to the safety program, and most important of all, to educate employees in every factor entering into safe performance of their duties.

4.2 Scheduling the Meetings

Regular meetings devoted to safety and loss control topics will be held within each department.

Meetings will be held during working hours as much as possible. If an employee is required to attend during his off-duty time, it will be considered hours worked.

Meetings should be scheduled on the same day of each week or month so that employees will become accustomed to a regular meeting day, i.e., every Tuesday or the first Friday of each month.

Place and time of the meetings will be determined by the Department Head.

Length of meetings may vary depending on frequency and material to be covered. Departments using heavy and/or dangerous equipment should meet monthly for one hour. All other departments should meet quarterly.

Copies of minutes of the meeting and attendance roster should be sent to the Safety Director.

4.3 Grouping of Employees

For the purpose of safety and loss control meetings, employees may be grouped by crews, shifts, or sections when it is not feasible to hold a meeting of all employees at one time.

4.4 Subjects Which Should be Covered

Safety meeting should pertain only to safety matters whenever possible except for brief announcements or discussions of interest to all employees. Emphasis should be on safety education and training. Some of the most important subjects which should be covered are listed below. They need not be taken up in the order given but those which are pertinent to the most serious problems of the particular group should receive attention first.

Accidents — Thorough coverage of accidents that have occurred within the department with emphasis on cause and procedures for preventing recurrence, what to do in case of an accident, procedures for reporting accidents, and/or injuries, etc.

Unsafe Acts or Unsafe Conditions — Discussion as to any acts or unsafe conditions that have been noted.

Others — Discussions or talks on falls, safe lifting, motor vehicle safety, artificial respiration, tool safety, materials handling, good housekeeping, fire prevention, use of personal protective equipment, home safety, and so forth.

4.5 Planning the Program

Just as meetings should be scheduled in advance, each program for the meeting should be planned sufficiently ahead of time to assure its success. Variety and unique methods are needed to maintain interest. Employees must be made to look forward to each meeting. A meeting that is not properly planned will result in poor reception by employees and could well be worse than no meeting at all.

One or more persons should be designated to be responsible for planning the safety meeting. The Department Head should require this person to present plans at least two to three weeks before the meeting is to be held.

The program for a meeting may include one of the following:

- A. Safety film, slide presentation
- B. Talk on an appropriate accident or loss prevention subject. The speaker may be a member of the department, the Safety Director, or an outside expert.
- C. Demonstration of artificial respiration, first aid, etc., with practice by employees.

4.6 Conducting the Meeting

The Department Head will designate a person to serve as permanent chairman of the meetings. In small meetings of a crew, shift, or section, this might be the supervisor, or for large departmental meetings, the Departmental Safety Person could be designated as chairman. Someone should also be designated to take minutes of the meeting. Copies of the minutes are to be sent to the Safety Director.

The chairman should follow an established order of business in conducting the meeting. The following is a recommended outline:

- A. Roll call;
- B. Reading of the synopsis from previous meeting;
- C. Old business — with emphasis on follow up of reported unsafe conditions listed in minutes of previous meeting;
- D. Programs (film, talk, demonstration, etc.);
- E. Review of all accidents that have happened since the last meeting;
- F. Report of unsafe conditions or unsafe acts from employees present.

4.7 Attendance

Attendance at safety meetings will be mandatory for all employees unless they are specifically excused, on leave of absence, or performing duties that will not permit them to attend. Records will be kept to indicate those personnel present and absent at each meeting.

5.0 Fundamentals of Accident Prevention

5.1 Basic Activities

Successful accident prevention requires a minimum of four fundamental activities:

1. A study of all working areas to detect and eliminate or control physical hazards which contribute to accidents.
2. A study of all operating methods and practices.
3. Education, instruction, training, and discipline to minimize human factors which contribute to accidents.
4. Thorough investigation of accidents to determine contributing circumstances.

5.2 Accidents are Preventable

Many persons, either through ignorance or misunderstanding, unfortunately believe that accidents are the inevitable results of unchangeable circumstances, fate, or a matter of luck.

It must be emphasized that accidents do not happen without cause and the identification, isolation, and control of these "causes" are the underlying principles of all accident prevention techniques.

No person in a supervisory position can be effective in his job of accident prevention, unless he fully believes that accidents can be prevented and constantly strives to achieve this result.

5.3 Causes of Accidents

Causes of accidents are divided into three major categories: (a) unsafe acts of people; (b) unsafe physical or mechanical conditions; and (c) acts of God (floods, hurricanes, etc.). Statistics indicate that 88% of all accidents are caused by unsafe acts of people, 10% by unsafe conditions, and 2% by acts of God.

Obviously, the greater percentages of accidents are caused by unsafe acts; therefore, emphasis of an accident prevention program is on the elimination of these unsafe acts.

5.4 Unsafe Acts

The majority of unsafe acts of persons may be assigned to one or more of the following classifications:

- A. Failure to follow instructions of proper job procedure.

- B. Cleaning, oiling, adjusting, or repairing equipment that is moving, electrically energized, or pressurized.
- C. Failure to use available personal protective equipment such as gloves, goggles, hard hats.
- D. Failure to wear safe personal attire.
- E. Failure too secure or warn.
- F. Improper use of equipment.
- G. Improper use of hands or body parts.
- H. Making safety devices inoperable.
- I. Operating or working at unsafe speeds.
- J. Taking unsafe position or posture.
- K. Unsafe placing, mixing, combining.
- L. Using tools or equipment known to be unsafe.
- M. Driving errors.
- N. Horseplay.

Unsafe acts are brought about usually by one of the following:

- A. Lack of knowledge, skill, coordination, or planning.
- B. Improper attitude.
- C. Physical or mental defects.
- D. Temporary lack of safety awareness at time of accident.

5.5 Unsafe Conditions

Most unsafe or hazardous conditions can be grouped into one of the following classifications:

1. Defective, inferior, or unsuitable tools, machinery, equipment, or materials.

2. Hazards of surroundings (poor housekeeping).
3. Hazardous methods or procedures.
4. Placement hazards (person not mentally or physically compatible with job requirements).
5. Inadequate guarding of machinery, equipment, work areas, etc.

5.6 Control of Accident Causes

There are three main methods utilized in the control of accident causes. They are: (a) engineering; (b) education and training; and (c) enforcement. These three methods, sometimes referred to as the three E's of safety, are as outlined below:

1. **Engineering** — Environmental causes of accidents or unsafe conditions, can be eliminated through the application of engineering principles. When an operation is mechanically and physically safe, it is unnecessary to be as concerned about the uncertain behavior (unsafe acts) of people. Machines are less apt to fail than men. It may be necessary to make mechanical revision or modifications to eliminate existing unsafe conditions, and in some cases, to prevent unsafe acts. Design of machine guards, automobile brakes, traffic signals, pressure relief valves, and hand rails are varied examples of safety engineering at work.
2. **Education and Training** — Just as safety engineering is the most effective way of preventing environmental accident causes (unsafe conditions), safety education is the most effective tool in the prevention of human causes (unsafe acts). Through adequate instruction, personnel gain useful knowledge and develop safe attitudes. Safety consciousness developed in personnel through education will be supplemented and broadened by specific additional instruction in safe working habits, practices, and skills. Training is a particularly important accident prevention control; it gives each employee a personal safety tool by developing in him habits of safe practice and operation.
3. **Enforcement** — Usually accidents can be prevented through adequate safety engineering and education. However, there are some people who are hazards to themselves and others because of their failure to comply with accepted safety standards. It is these persons for whom the strict enforcement of safety practices is necessary, backed by prompt corrective action. No organized accident prevention effort can be successful without effective enforcement because accidents are frequently the direct result of violations of safety principles. This is particularly true of vehicle accidents, many of which are caused by unsafe acts which constitute traffic law violations. Heads of departments and supervisors are responsible for enforcing safety standards and regulations. Failure to do so would be condoning conduct that leads to preventable accidents.

To be completely effective, accident prevention controls cannot be applied "hit or miss." All engineering, education, training, supervision, and enforcement measures will be directed toward the solution of specific problems based on collection of facts relating to unsafe acts or unsafe conditions.

5.7 Elimination of Unsafe Conditions

One of the most effective means of preventing accidents is the elimination of unsafe conditions. To preach safety while permitting unsafe conditions to exist is bound to create an obstacle to cooperation required from employees. The supervisor must take the initiative in these matters without need for instructions from higher authority. If the elimination is beyond the supervisor's scope of authority, he must bring the matter to the attention of his immediate supervisor or the head of his department.

Following are some of the procedures that should be carried out to eliminate unsafe conditions:

- A. Remove all obstacles and impediments to the safe movement of personnel, vehicles, or machines.
- B. Repair damaged floors, broken steps, broken glass, cracked walls and ceilings.
- C. Replace worn or damaged tools.
- D. Provide proper equipment for the hoisting and movement of heavy objects.
- E. Install guards for moving parts of machinery, fans, etc.
- F. Provide protective equipment such as goggles and hard hats.
- G. Insist on good housekeeping practices remove debris, waste material, and obsolete or useless equipment.
- H. Replace worn electrical wiring and fixtures.
- I. Post signs warning of hazards in certain areas.

The important part of eliminating unsafe conditions is doing so before an accident occurs. The principal goal of the supervisor should be to search out hazardous conditions and eliminate them before they cause work interruption or bring injury. Too often an unsafe condition allowed to exist simply because it has not caused an accident yet. The job must be made as safe as possible.

5.8 Control of Work Habits

Regardless of the degree of safety built into a job, unsafe actions on the part of human beings will always be a cause of injuries. Teaching employees good work habits mean showing them how to do their tasks with less risk to themselves, less spoilage (of materials), and less damage to equipment. Much of this instruction can be reduced down to a few simple principles or job rules. By concentrating on these, by showing the "why" as well as "how," and by constant supervising to correct promptly, safe work habits can obtain acceptance by employees.

Whenever possible, actual demonstrations of right and wrong ways of doing tasks should be conducted, always accompanied by the basis for preferring one work habit to another. Fully

important as the initial instruction is the watchful eye on subsequent performance. When the right way has been presented and agreed to by the individual worker, it is essential that failure to comply should be noted.

It may be desirable to insist that a certain step be repeated or a job be redone, simply to emphasize the seriousness with which safety rules should be met with appropriate disciplinary action, including discharge if necessary. No matter how skilled an employee may be in performing his duties, if he does not perform them safely, he is not considered to be a worthy employee.

5.9 Safety Orientation of New Employees

When a new employee comes to work, he immediately begins to learn things and form attitudes about the job, his boss, and fellow employees. If his department head, supervisor, and fellow employees appear to be unconcerned about accident prevention, he will most probably believe that safety is unimportant.

To form good safety attitudes, the new employee must be impressed by everyone's concern with the prevention of accidents at the time he starts to work. He must be told that unsafe workers will not be tolerated and that he will be required to obey safety rules and instructions, wear protective equipment whenever required, and attend safety meetings in order to continue as an employee of the University.

It will never be taken for granted that previous experience and apparent qualifications mean that "somewhere along the way" the new employee has learned to experience does not automatically exempt a newly hired vehicle operator from being thoroughly instructed in safe driving practices. He must be made aware of what is expected of him in his capacity of operating a University vehicle, and he must be checked to assure that he understands.

The supervisor will review safety rules and procedures with the new employee, pointing out the possible hazards involved in doing the job. If possible, the new employee should be assigned to work with a safety minded employee during the first few weeks. The new employee should be checked at frequent intervals, asked about any problems that may have arisen, and reminded of safe practices. Any tendency to overlook safety procedures should bring a prompt and vigorous warning or other appropriate action.

6.0 Investigation of Accidents

6.1 Purpose

Accident investigation is important and necessary if future accidents are to be prevented. Investigations are made to obtain information through which recommendations for corrective action can be developed. Corrective action may involve additional training, mechanical revision, direct supervision, or enforcement measures.

Investigations are primarily concerned with finding the "cause" of the accidents and are not necessarily concerned with fixing "blame." Investigations must be kept objective, factual, and free from the "punishment" motive, otherwise they will do more harm than good. This is not to say that responsibility may not be fixed where personal failure has caused the accident, or that such people should be excused from the consequences. However, the investigation itself is concerned only with the facts and the investigating individual or group is best kept free from involvement with the consequences.

The principal purposes of an accident investigation, therefore, are:

1. To learn accident causes so that similar accidents may be prevented by mechanical improvement, better supervision and employee instruction.
2. To publicize the particular hazard between employees and their supervisors and to direct attention to accident prevention in general.
3. To determine facts bearing on legal liability.

6.2 Cases to be Investigated

Every accident which results in death or disabling injury will be investigated. Near accidents or accidents resulting in non-disabling injuries should also be investigated because they are equally important from the safety standpoint. **An accident that results in only slight injury to one person may easily result in death to the next person.**

6.3 Persons Making Investigation

Every accident that results in a disabling or "lost time" accident will be formally investigated by the Safety Director and department head. Heads of departments are responsible for notifying the Safety Director immediately whenever a "lost time" injury occurs in order that investigation may be started as quickly as possible.

Depending on the nature of the accident and other conditions, investigation of accidents that do not result in "lost time" injuries may be made by the Department Head, the department safety person, the supervisor, or member of the departmental safety committee.

A supervisor should be required to investigate every accident and near misses which involves personnel or equipment under his supervision for his own information and in order to take or recommend corrective action to prevent recurrence of similar accidents.

6.4 Procedures for Making Investigations

Each investigation should be started as soon after the accident as possible. A delay of only a few hours may permit important evidence to be destroyed or removed, intentionally or unintentionally.

Following are guidelines to be used by persons conducting investigations:

1. **Prompt Investigation** — In order to obtain facts quickly and while they are still fresh, investigators should arrive at the scene as soon as possible after the accident has been reported.
2. **Interviews** — The injured person, the supervisor, and all witnesses will be interviewed to obtain their versions of the accident. For best results, allow each person to relate what happened in his own way. Only brief notes, if necessary, should be made by the investigator at this time. Complete, formal statements, if required, can be made later.
3. **Conditions** — Record information as to unsafe conditions noted, weather conditions, mechanical defects, and other physical evidence available. If possible, photographs should be taken of the scene.
4. **Unsafe Acts** — Note any reported unsafe acts that may have contributed to the accident.

6.5 Reports of Investigation

Written reports of investigation will be as complete as possible, preferably in narrative form. The report should include information that would answer the following questions:

- A. **WHO** was injured or **WHAT** was damaged?
- B. **HOW** did the accident happen?
- C. **WHERE** and **WHEN** did it happen?
- D. **WHO** saw it happen?
- E. **WHAT** persons, equipment?
- F. **WHY** did the accident happen?
- G. **WHAT** could and should have been done to prevent it and similar accidents?

The investigator must be particularly thorough in determining the **WHY** of the accident. For example, in the case of an employee receiving an eye injury, the investigator might list the cause as "failure to wear goggles" whereas the **WHY** here is: Why didn't he wear goggles? Were goggles available? If so, was he instructed to wear them? If so, why didn't he wear them?

7.0 Safe Practices

7.1 Personal Protective Practices

All employees as a condition of employment are required to follow the instructions contained in Section 7.0. See also Section 1.3.3, page 1-4, Employee Responsibilities.

Eye Protection — Goggles, face shields, or other suitable eye protection **will** be worn by employees whenever there is danger of exposing the eyes to flying particles, acid, caustic substances, harmful light rays, dirt or grease falling from under vehicles, or in any other condition considered harmful by the supervisor. Suitable eye protection devices will be purchased and furnished by the department.

Head Protection — **HARD HAT POLICY** — Appropriate hard hats will be furnished to and **worn** by **all** persons who are working in and around areas of different heights or other employees working at different levels where there is a possibility of falling, flying, or collapsing objects that could cause a head injury; in all construction areas where machines are being operated; or the movement of loading or unloading material overhead. When working in or around excavations, ditches or trenches, hard hats will be worn by operators of heavy equipment which is not enclosed on three sides; or any other condition where there is a possibility of falling, flying or collapsing objects; or where there is a possibility of electrical shocks, burns, flashes; or any condition the supervisor deems necessary to prevent an unsafe condition.

Hand Protection — The employer will furnish and **require the use** of regular work gloves. Special leather protectors, etc., will be furnished by each department.

Foot Protection — Employees will be encouraged to buy and wear safety shoes.

Ear Protection — Appropriate ear protection **will** be worn by employees whenever there is a danger or a threat to your hearing. Table 1401-A, Chapter N, page 1 of the Idaho Safety Code will be used in determining noise exposure.

7.2 Hand Tools

Many accidents result from improper use of tools and use of defective tools and equipment. Supervisors will assure that employees use only tools and equipment which are in good condition and for the purpose for which they are designed. Where proper and safe tools are not available for the work on hand, the employee is required to report the facts to the supervisor.

1. Tools which develop defects while in use will be removed from service, tagged, and not used again until they have been reconditioned.

2. Impact tools such as chisels, drills, hammers, and wedges with mushroom heads will not be used until they have been reconditioned.
3. Hammers, axes, shovels, and similar tools will not be used if the handles are loose, cracked, or splintered.
4. Shovels, picks, and similar tools will not be handled in such a manner as to endanger other workers nor will they be left lying in such a manner as to cause persons to trip.
5. Defective wrenches, such as open end and adjustable wrenches with spread jaws or pipe wrenches with dull teeth, will not be used as they are likely to slip.
6. Sharp edged or pointed tools will have the edge or point guarded at all times when not in use. Shovels and rakes left on the ground will have the sharp or pointed edges placed toward the ground.
7. All electric power hand tools will be properly grounded. If the power cord attached to the tool does not have a three-prong plug, the tools will be grounded by attaching one end of a wire to the metal frame of the tool and the other end to a grounded structure.
8. Extension cords will not be run across walkways or through oil or water. Cords will be inspected frequently for kinks, worn insulation, and exposed strands of wire. Cords found to be worn will be replaced.
9. Files or other tools with pointed edges will be equipped with suitable handles.
10. Tools, equipment, and materials will not be thrown or dropped from one employee to another or from one level to another, but will be transferred from one hand to another, by a hand line or a similar safe method.
11. Tools are to be carried in a toolbox, bag, or tool belt and not in pocket or pants belt. This is especially applicable to pointed or edged tools.
12. Tools lying around benches, near machines, and on floors or ladders cause accidents and get lost. Tools are to be returned to kit or storage when no longer needed.
13. Employees are to be cautioned to use the right size and type tools for the job.

7.3 Prevention of Lifting Injuries

The common types of injuries caused by lifting are back strains and hernias. Both injuries are the result of an over-stretching of certain muscles and generally can be avoided by the proper lifting

techniques. All personnel will be informed of the following procedures with a review of them twice every year.

1. An employee should never pick up anything that is too heavy or bulky for one man to handle safely. He should get someone to help.
2. An employee should never pick up a large object with a sudden jerk.
3. The right way to lift:
 - A. Get good footing.
 - B. Place feet about a shoulder width apart.
 - C. Bend at the knees to grasp the weight.
 - D. Keep the back as straight as possible.
 - E. Get a firm grip.
 - F. Lift gradually by straightening the legs.

7.4 Barricades and Warning Signs

Work area protection is the adequate safeguarding or protection of pedestrians, motorists, University employees, and equipment by the use of adequate barriers, warning signs, lights, flags, traffic cones, high level standards, barricade rope, flagmen, etc., on approaches to work areas, excavations, open manholes, parked equipment, blocked traffic lanes, etc.

The traveling public must be made aware before they get to the work area that the presence of work forces and equipment form an obstruction to the normal flow of traffic.

The possibility of accidents occurring is greatly minimized by proper planning, design, installation, operation, and maintenance, coupled with the use of common sense.

Following to be designated by the supervisor or foreman:

- A. Check the job site for traffic conditions.
- B. Schedule the job for a time when traffic conditions are most favorable to do the job safely.
- C. The size of the work areas will be kept at a minimum and unnecessary equipment and vehicles eliminated from the work area.

- D. Open manholes and excavations will be adequately identified and protected. Necessary precautions should be taken to assure proper support of loads adjacent to and over the excavated area.
- E. The unauthorized removal of any protective barricades will be prohibited. Temporary removal required other safety control, such as the posting of a flagman to direct traffic. Whoever removes a barricade will be responsible for its replacement.
- F. Protective or warning devices will be removed from the job site as soon as they are no longer necessary.
- G. Departments will be informed of all jobs where barricades are in service and this department will make periodic checks on the aforementioned job sites to see that barricade protection is in good operating condition during the hours of darkness.

7.5 Good Housekeeping Practices

Good housekeeping will be of a primary concern to all supervisors. The following rules will be known and heeded by all individuals:

1. Housekeeping will be a part of the daily routine, with a cleanup being a continuous procedure.
2. The work areas will be kept free of waste and loose materials. This is especially true in the vicinity of ladders, ramps, stairs, and passageways.
3. An effective means of preventing careless litter will be provided, i.e., material in trash bins and garbage cans should be placed in convenient locations so that the employees find it easy to keep the individual locations free from trash and other debris.
4. Obsolete and unusable equipment, metal scraps, discarded tools, or old parts should not be allowed to accumulate around buildings.

7.6 Office Safety

Good housekeeping in the office is a must. Keep your desk and cabinets clean and orderly.

The work areas will be kept free of waste and loose materials. This is especially true in the vicinity of ladders, ramps, stairs, and passageways.

The standard four drawer filing cabinet can cause injury if it upsets as a result of opening a heavily loaded top drawer. Open only one drawer at a time.

Use handles when closing desk drawers, files, safes, and doors.

All chairs should be used sensibly. Don't tilt them or slump back. The added strain on the chairs can cause them to break or slip, resulting in injury to the occupant. Don't keep defective chairs in use.

If you must reach high or do any climbing, use a safe ladder and not makeshift boxes, cabinets, etc. Do not use a chair for climbing.

Make sure that typewriters and adding machines are properly fixed in place.

Don't attempt any electrical repairs.

Cords on electrically operated machines and telephones create a tripping hazard when left on the floor or on walkways. Arrange the work area to avoid this hazard.

When using extension cords, place them so that they do not lie in a traffic area (tripping hazards) or through doors which may be closed and cut the cord.

Do not remove the ground prong of a three-prong plug. Electrical equipment with a three-prong plug requires a three-hole receptacle. If an adapter must be used to accommodate a two-prong receptacle, have maintenance personnel assure that the adapter is properly grounded.

Walk, don't run. When walking in hallways, keep to the right, especially at corners.

Do your reading at your desk, not while walking.

When using stairways, take your time and use the handrails.

Don't stand and talk in front of a closed door that may be suddenly opened.

When smoking, remember the fire hazard use ash trays, not wastebaskets.

Avoid spilling or splashing liquids on the floor. This might cause someone to slip or fall.

Slips of paper, a pencil, or even a paper clip on the floor can cause a slip or fall. Remember good housekeeping.

Daydreaming is a dangerous habit. Keep your mind on the job.

Sharpened pencils should be placed point down, in pencil holders. Other sharp objects — scissors, letter openers, etc. — should be covered or placed to prevent puncture wounds.

Carry pencils, fountain pens, scissors, etc., in such a way that the sharp end cannot cause puncture wounds to you or others.

Report all defective equipment to your supervisor for repair.

REMEMBER, report all on-the-job injuries to your supervisor immediately.

7.7 Specific Safety Instructions

The following are specific safety rules developed for various University on-the-job activities. Make yourself familiar with all of these rules and pay strict attention to those rules governing your activities. If your activities are not covered by this manual, check with your supervisor or foreman.

7.7.1 Building Maintenance

When replacing bulbs or fluorescent tubes, observe the following precautions:

1. Ask person(s) to move from under fixtures.
2. Select ladder for proper height.
3. Remove globe or fitting and place on desk or floor beneath ladder.
4. Remove bulb with protective device if bulb is hot.
5. Be sure fluorescent tubes are properly locked in place.
6. Replace globe and fittings, using both hands, making sure they are secure.
7. Never carry light bulbs in pockets.
8. Light bulbs should never be wiped with a damp cloth while still in the socket. Do not use an oily cloth to wipe light bulbs.

9. Report any fixture or appliance from which shock is received.
10. Be aware that defective fluorescent tubes contain powder that can be harmful or fatal.
11. Disconnect all power sources while working and place a warning sign on power box control that work is in progress.
12. Inspect all portable electrical equipment periodically.
13. Handle broken glass carefully. Do not handle with bare hands. Place in a suitable container and dispose of promptly. Do not place in trash or waste baskets that are accessible to other employees or the public.
14. Replace broken windows or door panes promptly.
15. Broken or jagged ash or trash cans or other metal receptacles will not be used.
16. When cleaning floors, stairways, etc., place warning signs for other persons. Wet or slick floors, stairways, or handrails can cause accidents. Never allow a stairway or handrail to become slippery.
17. Never use fingers or bare hands to comb down mops.
18. Poor housekeeping breeds fire. All storage areas should be kept neat. Cardboard boxes, paper, and other flammable materials should not be allowed to accumulate but be removed to a safe storage bin immediately.
19. No stairway or exit way should ever be used for a storage area, even temporarily.

7.7.2 Machinery

The following rules apply in general to all machinery. Check specific section for additional information.

1. Never operate machinery or equipment without authority and/or adequate instructions from supervisory personnel.
2. All gears, belts, drive wheels, or other power transmission equipment will be completely enclosed if possible or provided with adequate guards if not enclosed.
3. Guards and safety devices must be kept in place at all times except when necessary to remove them for repairs or services.

4. Stop machinery before adjusting, oiling, or cleaning.
5. Chips will be cleaned by brushing from machinery, equipment, or work benches. Never use hands to brush chips, dust, or other materials from work benches or equipment.
6. Loose clothing, neckties, gloves, rings, and bracelets will not be worn when working with rotating machinery, mechanical equipment, or motors.
7. Wear necessary safety equipment when using or when near operating equipment.
8. Never apply a wrench to moving machinery; stop the machinery, then carefully remove all tools before starting again.
9. Do not leave machines unattended while they are running.
10. Machine operators should not be distracted by other persons while on the job.
11. A vice or clamp should be used to secure objects for drilling operations.

7.7.3 Hand Tools

Wrench

- A. Be sure wrench is adjusted to fit tightly or is the correct size, open end or box wrenches.
- B. Pull, don't push, when using a wrench.
- C. Don't tighten a nut or bolt too much. You may strip the threads or snap the bolt.
- D. When stooping and using a wrench or when using a large wrench on heavy work, brace yourself to avoid slipping or being thrown off balance. When using a wrench while lying on your back, don't let it slip and hit your face.
- E. Never hit a wrench with a hammer unless the wrench is made for striking.
- F. Don't use a pipe or other wrench extension on a wrench handle to increase leverage. This often causes stripped threads, broken bolts, sudden loosening of nuts or bolts, slipping of the pipe from the wrench and broken wrenches and fingers.
- G. When pulling on a wrench above you, stand out of its line.
- H. Place wrench so that the force will be on the stationary jaw.

Screwdriver

- A. Don't use screwdrivers with broken or rounded points or bent shafts.
- B. When using a screwdriver, place work on a solid object; never hold it in the palm of your hand.
- C. Keep the screwdriver shank directly over the screw head.
- D. Never use pliers or wrenches on the shanks of screwdrivers unless they are a type especially designed to withstand the strain.

Saw

- A. Use each type of saw only for the purposes for which it is intended.
- B. Start the cut carefully so the saw will not jump and strike you.
- C. Be sure that the materials to be cut are firmly supported or secured. When sawing horizontally, cut on the side opposite the direction in which you want the cut off parts to fall.

Chisel

- A. Hold the chisel in your fingers with a steady but a relaxed grip. Keep your eyes on working area.
- B. Clamp small pieces in a vise before chiseling them. Chip toward the stationary jaw of the vise. Chip away from yourself.
- C. Wear goggles when chipping.

Punching

- A. Keep the points of center punches round and the faces of starting and pin punches square.
- B. Don't use center punches on materials hard enough to dull or shatter the points.
- C. Be sure punches are held firmly in position before striking, especially on round surfaces. Strike lightly at first, then increase the force.

Files and Rasps

- A. Cut only in the forward direction. Ease pressure on the backward stroke. When teeth become clogged, clean them with a file card (a brush with short, stiff wire bristles).
- B. When storing files or rasps in tool boxes, wrap each tool with cloth or paper.
- C. Don't use file and rasps on materials that are too hard or soft. Hard objects wear the teeth smooth. Soft objects clog the teeth. Smooth cutting faces may cause the tool to slip suddenly and injure you.

Hacksaw

- A. Place the blade in the frame so the teeth point toward the end of the frame and away from the handle. Tighten the blade rigidly.
- B. Cut away from yourself and saw with straight, long strokes, using almost the whole blade. Ease pressure on the backward stroke.
- C. Judge cutting speed by the hardness of the metal. 40 to 50 strokes per minute is right for metals of average hardness. A faster rate may ruin the blade.
- D. Don't saw objects that are too hard. Test objects for hardness with the front or rear end of the blade.

Pliers

- A. Use pliers only when no other tool will do the job.
- B. Don't use pliers as wrenches.
- C. Use cutting pliers only for cutting soft metals, never on hardened metals or as nail pullers.
- D. When cutting wire that is under tension, protect yourself so the wire can't fly and strike you. When cutting wire in rolls and on bales, loaded cars, trucks, boxes, use long handled wire cutting pliers.

Axe

- A. Check the axe head to see that it is sharp and has no defects. A dull axe will often glance off the wood being cut and strike the user.

- B. Check the axe handle to make sure it is not cracked and that the axe head is securely attached.
- C. Be sure that others are a safe distance away from you and clear the area of obstructions (vines, limbs, brush, etc.) that may catch the axe as it is swung.
- D. A narrow axe with a thin blade should be used for hard wood, and a wide axe with a thick blade for soft wood.
- E. Axe blades should be protected with a sheath or other guard. When the blade cannot be guarded, it is safer to carry the axe at one's side in a manner that it will not strike the leg or foot when walking. The blade of a single-edged axe should be pointed down when being carried.

Hatchet

- A. Check the blade and handle for defects and make sure the head is secure to the handle.
- B. To start the cut, it is good practice to strike the wood lightly, then force the blade through by striking the wood against a solid block of wood.
- C. Use caution to protect others when using a hatchet.
- D. Using a hatchet to drive nails is a poor practice.

Hammer

- A. A sledge hammer is unsafe to use if it has a split handle or a loose or heavily chipped head.
- B. Sledge hammer heads should be dressed whenever they begin to check or mushroom.
- C. A sledge hammer so light that it bounces off the work is hazardous; likewise, one too heavy is hard to control and may cause body strain. Select one of the proper weights for the work to be done.
- D. Claw hammers are designed for driving and drawing nails. Their shape, depth of face, and balance make them unsuitable for striking objects such as cold chisels.

7.7.4 Power Tools

Know your power tool. Read owner's or operating manual carefully. Learn the tool's applications and limitations, as well as the specific potential hazards peculiar to it. Use the proper tool for the job you are doing.

Ground all electrical tools unless double insulated. If a tool is equipped with a three-prong plug, it should be plugged into a three hole electrical receptacle. If an adapter is used to accommodate a two-prong receptacle, the adapter wire must be attached to a known ground. Do not rely on the screw securing the receptacle cover plate to be an acceptable ground check before using. Never remove the ground prong of a three-prong plug.

Keep guard in place and in working order.

Keep work area clean; cluttered areas and benches invite accidents.

Don't use an electric power tool in damp or wet locations.

All visitors should be kept a safe distance away from work areas.

When not in use, tools should be stored in dry, high or locked up locations.

Don't force a tool; it will do the job better and safer at the rate for which it was designed.

Use the right tool; don't force a small one to do the job of a heavy duty tool.

Loose clothing or jewelry which may get caught in moving parts should not be worn. Rubber gloves and footwear should be used when working outdoors under wet weather conditions or wet soil conditions with an electrical tool.

Use safety glasses. Use a face or dust mask if the cutting operation is dusty.

Never carry a tool by the cord or yank it to disconnect it from a receptacle. Keep the cord away from heat, oil, and sharp edges.

Use clamps or a vise to hold work. It's safer than using your hand, and it frees both hands to operate the tool.

Keep proper footing and balance at all times.

Keep tools sharp and clean at all times for the best and safest performance.

Disconnect tools when not in use.

Remove adjusting keys and wrenches; see that keys and adjusting wrenches are removed from the tool before connecting the tool to the source of power.

Don't carry a plugged in tool with the finger on the switch.

Use only approved properly insulated and inspected extension cords.

Always examine both the cord and connections of an electrical power tool before using. When using pneumatic hand tools, make sure hose is properly connected and keep the air valve closed until the gun is actually ready to use.

When Using Compressed Air

- A. Use only sound, strong hose with secure couplings and connections.
- B. Be sure there are no sharp points on metal hose parts.
- C. Close the control valve in portable pneumatic tools before turning on air.
- D. Before changing one pneumatic tool for another, turn off the air control valve. Never kink hose to stop air flow.
- E. Wear suitable goggles, mask, protective clothing or safety devices.
- F. Never use air to blow dust or chips from the hair, clothing, or safety devices.
- G. Never point the hose at anyone. Practical jokes with compressed air have caused many serious injuries.
- H. When using compressed air, see that no nearby workers are in line of air flow.
- I. All compressed air supplies used for blowing must be equipped with 30 p.s.i. regulators.

When Using Bench or Hand Grinders

- A. Wear goggles or a face shield even though the wheel has a glass shield.
- B. See that the protective hood is on the wheel.
- C. Set the work rest no more than 1/8 inches from the wheel. Stop the machine before adjusting rest.
- D. Stand out of line when starting up.
- E. Feed the work gradually — give a cold wheel a chance to warm up.
- F. Use only the face of the wheel, unless it is designed for safe grinding.

- G. Do not strike the wheel suddenly or use too much pressure.
- H. Report at once any grinder that appears to be unsafe.
- I. Check the grind stone to insure that it is properly designed for the work being done and the speeds being used.
- J. Do not use the grinder if tool rest or shield is missing.

When Using Chain Saws

- A. Never work alone, but other employees in area should keep a safe distance from a running saw. Have a cleared work area.
- B. Wear proper personal protective equipment.
- C. Always carry the saw with the engine stopped, guide bar and saw chain to rear, and the muffler away from the body.
- D. Stand at engine end of running saw, keeping body parts away from saw chain.
- E. Place the saw out of way when not in use.
- F. Avoid "running" chain contact (chain should not run on the bar while idling). Adjust the clutch and carburetor to prevent this.
- G. Make sure chain is not touching anything before starting.
- H. Shut off the engine when refueling, adjusting, cleaning, etc. Use a spout can to refuel. Keep fuel in approved safety cans.
- I. Never operate the saw with an excessively loose chain. Keep teeth sharp.
- J. Control tree fall. Undercut 1/3 diameter on the side to which you want it to fall. Back cut about 2 inches above undercut and do not cut through to the undercut but leave some hinge wood.
- K. Watch for dead wood in the tree which may fall during the cut.
- L. Plan an escape route, shut off engine and move away. As the tree begins to fall, move 10 to 20 feet away from the base along your cleared route.

- M. Warn others in tree fall area. Do not fell trees within 150 feet of other operations unless precautions to warn personnel are taken.
- N. When climbing a felled tree, keep a firm grip on the handle of the saw with the thumb locked under the handle. Limbs can snap back as they are cut and throw the saw against you.

7.7.5 Electric Hand Tools

Keep tools in good condition — cleaned, oiled, and repaired.

Always use grounded or double insulated tools.

Use only approved and inspected three wire extension cords.

Always examine both the cord and connections carefully before using.

Never jerk an extension cord out of the socket.

Never pass an extension cord over nails or other sharp edges or allow it to become kinked or leave it where a vehicle may run over it. Wire or insulation will be damaged.

It is bad practice to patch any serious damaged cord insulation with tape. Replace the cord.

Wear goggles while using electric hand tools.

Do not use electric tools in the presence of flammable vapors or materials.

Store extension cord in a clean, dry place where it can lie loosely coiled.

Remove all "trigger locks" from power hand tools. Do not use a tool if "trigger" lock is still functioning. When working outside with electric hand tools, the National Occupational Safety and Health Act requires that "trigger locks" be removed.

Never use electric tools having worn or damaged cords, damaged plugs, defective switches, or other defective parts which might give an electric shock.

7.7.6 Garage and Shop Safety

Shop employees are constantly surrounded with serious hazards on the job. In order to prevent accidents, it is essential that physical and human failures be overcome by maintaining safe garage conditions and following safe practices. The following are general rules for improved garage safety. (Specific rules for certain activities are included elsewhere in this handbook.)

When lifting with a jack, observe the following rules:

- A. Never use a jack about which you have any doubt.
- B. Make sure the footing is substantial; use boards or blocks at right angles to the lift.
- C. Position the jack properly for the lift.
- D. Position the jack so there will be an unobstructed swing of the handle, thus protecting your knuckles
- E. Never leave a jack standing under a load with the handle in the socket. Something might strike the handle and knock the jack out of position.
- F. Make sure that all jack lifting loads are braced diagonally so that the jack cannot tip over.
- G. Never rely on jacks alone to support any load you have to work under. Use plenty of substantial blocking. Have an ample factor of safety. If jack stands are used, inspect them before using and position them properly to support the vehicle.

Use only approved and inspected portable electric tools and electrical lamps (see section on portable power tools). When using portable extension lamps, observe the following rules:

- A. Always use a well guarded and grounded lamp.
- B. If flammable liquids, vapors, or dusts are present, make sure that you are using a safe type of lamp and guard; ask your supervisor if you are not entirely sure. If at all possible, eliminate the hazard before proceeding with work.
- C. Do not try to patch the insulation of a defective cord.
- D. If the cord is too short to reach the necessary distance, do not splice it; get a new cord or another extension.
- E. It is bad practice to pull on the cord to disconnect a wall plug; the wires may be loosened or pulled free from the socket.
- F. Pulling a cord by the lamp socket is bad practice because the cord may catch and be pulled free.
- G. Dragging a cord over nails, hooks, tools, or other sharp edges may cause cuts in the insulation, and therefore, short circuits. If flammable vapors or dusts are present, an explosion may result.

H. Do not allow the extension cord to touch acids, oil, solvents, or even water unless it has a proper kind of insulation to protect it.

I. Check to insure that all electric cords have acid and cut resistant insulation.

Be sure your feet are clear of passing automobiles or moving machinery when you get under a car, truck, or piece of equipment.

Guard against carbon monoxide gas from the exhausts of running engines. See that there is proper ventilation.

Do not allow gasoline to stand in open containers. If gasoline must be stored, use only approved safety containers.

Use a safety grip (thumb not around the handle) when it is necessary to use a crank.

Don't attempt to lift anything too heavy for you. Get help or use a hoist.

Watch the wrenches and other tools you use. Keep them in safe working condition.

Keep a pair of safety goggles handy and wear them when doing work in which eye protection is needed.

Keep aisles and open spaces on the floor free of tools and parts.

Be on your guard against flashes or explosions of gasoline vapors, alcohol antifreeze solution vapors and hydrogen from storage batteries. Keep flames and sparks away.

If your clothes become soaked with oil, gasoline, or other flammable liquids, don't take the risk of catching on fire.

Never consider a job complete until you have checked to make sure all the lock washers and cotter pins are in place. Someone's life may depend on it.

Never allow grease and oil to remain on the floor where you and others might slip on it and fall.

Always keep a suitable fire extinguisher near at hand and ready to use.

Gasoline will not be used for cleaning purposes. It has a very low flash point and is therefore a fire hazard. Use an approved nonflammable cleaner. Also, much commercial gasoline contains tetraethyl lead. Due to the hazard of lead poisoning, do not wash the hands or other parts of the body with gasoline.

When removing or replacing a battery, disconnect the ground cable first and reconnect it last when replacing the battery.

When servicing vehicles on a lift, observe the following rules:

- A. Car lifts or grease racks will be operated only by trained garage personnel familiar with all safety features of the particular type being used.
- B. Vehicles placed on lifts should be raised until the wheels clear the floor and then rechecked for proper position before fully raising.
- C. Safety pin or safety leg will be locked securely in position before working under a raised lift.
- D. It is best to stand to the side — not front — of a vehicle to guide it onto a lift.

When refueling vehicles and equipment:

- A. Observe "no smoking" rules.
- B. In order to prevent ignition from static electricity stored within the vehicle, touch the metal nozzle on gas hose against the car bumper. During the entire filling operation the nozzle will remain in constant contact with the vehicle.
- C. Do not overfill vehicle fuel tanks. If overflow results, immediately flush with water.
- D. Gasoline dispensing equipment will be located outdoors.

If overhead work is in progress, all personnel will wear approved safety belts and hard hats.

7.7.7 Excavations, Trenching and Shoring

Walkways, runways, and sidewalks will be kept clear of excavated material or other obstructions and no sidewalks will be undermined unless shored to carry a minimum live load of 125 pounds per square foot.

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

Prior to opening an excavation, it will be determined whether underground installations such as sewer, telephone, water, fuel, electric lines, etc., exist, and if so, where such underground installations are located. When the excavation approaches the estimated location of such an

installation, the exact location will be determined and when it is uncovered, proper supports will be contacted and advised of proposed work prior to the start of actual excavation.

Trees, boulders, and other surface encumbrances are located so as to create a hazard to employees involved in excavation work or in the vicinity thereof at any time during operations will be removed or made safe before excavating.

Excavation Workers

- A. Do not jump into a trench; sit on the shoulder and slide in. If the trench is more than three feet deep, use a ladder. When getting out of a trench, look all ways for traffic danger.
- B. Keep a safe distance from fellow workers to avoid danger of striking them with tools.
- C. Keep the shoulders of the trench free from tools, materials, stones, and loose earth.
- D. If possible, keep the soil bank between you and traffic.
- E. If the walls of a trench contain glass, wire, and other sharp objects, remove them carefully and promptly.
- F. Trenches must be braced whenever sand or other loose soil is encountered. Keep the soil bank far enough from the edge of the trench to avoid excess weight and cave-ins.
- G. When making a tunneled opening, make sure that the soil is compact to prevent cave-ins, or that it is suitably braced.
- H. Proper shoring of trenches and tunnels is especially important near streets and railroad lines.
- I. Be careful not to strike electric conduits or other underground systems, particularly when using a pick or an air gun in a trench or tunnel.
- J. Use only tools in good condition.
- K. Be careful to remove earth or other materials in such a way as to leave no overhangs.
- L. If an overhang occurs, remove it by working from the side toward the center and always face the point of danger.
- M. When resuming excavation work after heavy rains or freezing weather, inspect all banks for cracks and slight earth movement which may indicate the beginning of a slide.
- N. If caught in a landslide, run up the bank, never down.

Shoring Trenches

Many men have been buried alive or seriously injured because the supervisor failed to instruct the employees to shore the sides of trenches in which they were working. You are not required to take chances with your life. Take the following precautions:

- A. In hard compact ground, other than running saturated, filled, or unstable material, trenches more than four feet deep should be shored with 2 inches by 6 inches planks placed vertically against the side walls of the trench, opposite each other and at frequent intervals.
- B. To guard against ruining material, use sheet piling adequately braced. This should not be less than 2 inches thick for trenches between four feet and seven feet deep and for trenches more than seven feet deep not less than 3 inches thick.
- C. For trenches in filled, unstable or saturated (not running) material, use sufficient sheeting to adequately hold the material in place.
- D. Use only lumber that is sound and straight.
- E. Do not place excavated material nearer than 18 inches to edge of the trench.
- F. Keep the shoulders clear of all loose objects that might fall on you or others working in the trench.
- G. Shoring systems should be inspected daily. If dangerous ground movement is apparent, all work in the excavation should be stopped until the problem has been corrected.
- H. When work is in a trench four feet deep or more, adequate means of exit, such as a ladder or steps, should be provided for quick escape. In long excavations, these exits should be no more than 25 feet apart. Ladders should extend three feet above the top of the excavation and be secured at the top.
- I. When removing bracing, always remove the lower braces first leaving the upper ones until last for your protection. In unstable soil, ropes should be used to pull out jacks and braces from above.

7.7.8 Welding

When possible, welding or cutting should be done in special fire safe areas or rooms with concrete or metal plate floors.

In cases where welding and cutting operations are performed outside the special fire safe areas:

- A. Inspect area where work is to be done.
- B. Provide fire extinguisher equipment.
- C. Isolate combustibles from sources of ignition.
- D. Limit unauthorized use of flame or spark producing equipment.
- E. When welding is done in areas that are open to all personnel, the equipment should be posted with warning signs hung on the equipment.

Welding processes emit radiations in three special bands:

- A. Ultraviolet radiations, whose wavelengths are shorter than those of visible bands, are capable of producing cumulative destructive changes in the structure of the cornea and lens of the eye.
- B. Radiations in the visible band, if too intense, can cause eyestrain and headaches from muscular fatigue and destroy the tissue of the retina, as is the case in eclipse blindness.
- C. Infrared radiations, whose wavelengths are longer than those of the visible spectrum, transmit large amounts of heat energy to the eye with a consequent heating of the eye tissue.

Gas welding presents problems mostly in the control of infrared and visible radiations. Heavy amperage arc welding also presents problems in the control of ultraviolet radiation.

Lenses of proper shade will be used that protect the eyes from the mentioned exposures.

Moveable exhaust hoods are needed for most indoor welding applications and is a must when welding potentially toxic materials such as a lead containing or lead painted metal and beryllium alloys.

Electric Arc Welding

- A. Keep leads as short as possible.
- B. Take electrodes out of the holder when not in use.
- C. Do not use pipelines containing gases or flammable liquids or conduits carrying electrical conductors for "grounds."

Handling Cylinders

1. Serious accidents may result from the misuse, abuse, or mishandling of compressed gas cylinders. Employees assigned to the handling of cylinders under pressure should be carefully trained.
2. Accept only cylinders approved for the use in interstate commerce for transportation of compressed gas.
3. Do not remove or change numbers or marks stamped on cylinders.
4. When cylinders must be moved without the aid of a cart or other mechanical means, use some type of carrying device. Cylinders may be rolled a short distance on the bottom edge but never dragged.
5. Protect cylinders from cuts or abrasions.
6. Do not drop cylinders or let them strike each other violently.
7. Do not use cylinders for rollers, supports, or any purpose other than to contain gas.
8. Do not tamper with safety devices on the valve or cylinders.
9. When in doubt about the proper handling of a compressed gas cylinder or its contents, consult the supplier of the gas.
10. When empty cylinders are to be returned to the vendor, mark them "EMPTY" or "MT" with chalk. Close the valves and replace the valve protection caps.
11. Always consider cylinders as full and handle them with corresponding care. Accidents have resulted when containers under partial pressure were thought to be empty.
12. The fusible safety plugs on acetylene cylinders melt at about the boiling point of water. If an outlet valve becomes clogged with ice or frozen, it should be thawed with warm (not boiling) water applied to the valve. A flame should never be used.

Storing Cylinders

- A. Cylinders should be stored in a safe, dry, well ventilated place prepared and reserved for the purpose. Cylinders should be chained or otherwise fastened firmly against a wall, post, or other solid object.

- B. Flammable substances, such as oil and volatile liquids, should not be stored within 20 feet of cylinder storage.
- C. Cylinders should not be stored near elevators, gangways, stairwells, or other places where they can be knocked down or damaged.
- D. The total capacity of acetylene cylinders stored inside a building should be limited to 2,000 cubic feet of gas, including cylinders in use or connected.
- E. When oxygen and acetylene cylinders must be stored in the same building, each type should be stored separately, preferably in separate sections of the building.
- F. Cylinders should be protected from direct rays of the sun in summer and from any heat such as radiators, furnaces, or any other source of heat.
- G. A direct flame or electric arc should never be permitted to contact any part of a compressed gas cylinder.

Using Cylinders

- A. Use cylinders in an upright position.
- B. Keep the cap in place to protect the valve except when the cylinder is connected for use.
- C. Do not force connections on the regulator or union if they do not fit.
- D. Open cylinder valves slowly.
- E. Before making connection to a cylinder valve, except that of a hydrogen cylinder, "crack" the valve for an instant to clear the opening of particles of dust or dirt.
- F. Never use oil or grease as a lubricant on valves or attachments.
- G. Do not stand directly in front of regulator gauges when opening the tank valve. Sudden pressure could blow out gauge glass and parts.

Hoses and Hose Connections

The oxygen and acetylene hoses should be of different colors or otherwise identified and distinguished from each other. Red is generally the recognized color for fuel gas hose and green for oxygen hose.

- A. Do not use unnecessarily long hoses; it's hard to purge properly when a long hose must be used, see that it does not become kinked or tangled and that it is protected from being run over by trucks or otherwise damaged.
- B. Repair leaks at once. Besides being a waste, escaping fuel gas may become ignited and start a serious fire. Repair hose leaks by cutting the hose and inserting a splice. Don't try to repair leaking hoses by taping.
- C. Protect hoses from flying sparks, hot slag, other hot objects, and grease and oil. Store hose in a cool place.
- D. If a flashback occurs and burns in the hose discard the burned section and purge the new hose before connecting it to the torch and regulator.

Eye Protection

Helmets or hand shields will be used during all arc welding or cutting. Goggles or other suitable eye protection will be used during all gas welding or oxygen cutting operations. The following is a guide for the selection of proper shade numbers:

	<u>Shade No.</u>
Shielded Metal - arc welding 1/16-5/32 inch electrodes	10
Gas Shielded - arc welding (nonferrous) 1/16-5/32 inch electrodes	11
Gas Shielded - arc welding (ferrous) 1/16-5/32 inch electrodes	12
Shielded Metal - arc welding 3/16-1/4 inch electrodes	13
Shielded Metal - arc welding 5/16-3/8 inch electrodes	14
Atomic Hydrogen Welding	10-14
Carbon Arc Welding	
Torch Brazing	3 or 4
Light cutting - up to 1 inch	3 or 4
Medium Cutting - 1 inch to 6 inches	4 or 5
Heavy Cutting - 6 inches and over	5 or 6
Gas Welding (light) - up to 1/8 inch	4 or 5
Gas Welding (medium) - 1/8 inch to 1/2 inch	3 or 6
Gas Welding (heavy) - 1/2 inch and over	6 or 8

Protective Clothing

Employees exposed to the hazards created by welding, cutting, or brazing operations will be protected by personal protective equipment. Appropriate required protective clothing will vary with the size, nature, and location of the work to be performed

- A. All welders should wear flameproof gauntlet gloves.
- B. Flameproof aprons made of leather or other suitable material may also be desirable as protection against radiated heat and sparks.
- C. Woolen clothing is preferable to cotton because it is not so readily ignited.
- D. For heavy work, fire resistant leggings, high boots, or other equivalent means should be used to protect the operator.
- E. Capes or shoulder covers made of leather or other suitable materials should be worn during overhead welding or cutting operations.

Health Protection and Ventilation

- A. Ventilation or respiratory protective devices should be provided as needed to meet the equivalent requirements such as:
 - (1) Atmospheric conditions.
 - (2) Heat generated.
 - (3) Presence of volatile solvents.
- B. Screens — When welding must be performed in a space entirely screened on all sides, the screens will be so arranged so that no serious restrictions of ventilation exist. It is desirable to have the screens so mounted that they are about two feet above the floor.

7.7.9 Working in Manholes

Place traffic guards around the manhole, and display proper warning signs and lights.

Use a proper tool to remove and replace manhole cover.

Test the manhole for gases by an approved method. If dangerous gases are present or if there is a deficiency of oxygen, ventilate the manhole by using a forced air method. Make sure that the air delivered to the manhole is not contaminated by motor vehicle exhaust gases.

Force a current of fresh air into the manhole by means of a blower and hose. The output end of the blower hose should be placed near, but not on the floor of the manhole to force gases up and out of the opening.

To avoid dead air spaces in which explosive gases may accumulate, the output end of the hose should be directed toward an end wall to circulate the forced air more evenly.

Never enter a manhole, even momentarily, until it has been tested for combustible gases and oxygen deficiency and properly power ventilated.

Remember that you can never second guess the presence of explosive or toxic gases in a manhole. Gases may be present at one time of day but not at another time. Always test a manhole before entering.

After ventilation, again test the manhole. If the air content is questionable, enter ONLY under specific orders of your supervisor after putting on respiratory protection and a lifeline. Have a helper stationed at the manhole entrance holding the lifeline in his hands. Also, have standby respiratory equipment on hand in case the helper must enter the manhole to assist.

DO NOT SMOKE or permit smoking about the manhole.

Tools left lying about the manhole are stumbling hazards. Keep surplus equipment in the vehicle or other approved location.

7.7.10 Construction Safety

Wear heavy soled safety shoes or boots, clothing suitable for the work and weather, gloves or hand leathers, and hard hats and goggles.

Always watch your step. Look out for backing trucks and all moving vehicles, whether on the job or driven by the public.

Keep warning signs and barricades in place.

Load trucks from one side only. Watch for stones and clods falling from the load.

When handling form lumber, remove or bend all protruding nails. Pile lumber and other articles so they cannot fall.

Do not touch fallen wires they might be electrically charged. Notify your supervisor of the unsafe condition.

If working with or near compressed air tools, wear goggles. Never point the tool or air hose at any person.

Never repair or adjust any machine while it is running. Never clean machine parts or tools with gasoline. Always stop the engine before filling the tank with gasoline.

When Using Asphalt

- A. Wear sleeves over your wrists, shirt buttoned to the neck, and trousers over your shoe tops.
- B. Wear proper gloves without gauntlets or fasteners inside your shirt sleeves.
- C. Make sure that kettles are on a firm level foundation and absolutely dry.
- D. See that asphalt is dry before you reheat it. If the batch foams when it is melted, reduce heat and stir vigorously.
- E. Do not overheat. If the vapor changes to a dense yellow, reduce heat at once.
- F. Have a fire extinguisher handy and know how to use it.
- G. If hot asphalt splashes on your skin, cool it with water and seek medical attention.
- H. When working around asphalt, observe “NO SMOKING” rules. When asphalt is hot, its fumes are just as explosive as gasoline fumes.

7.7.11 Jackhammer and Portable Power Hammer Operations

Before starting work, learn what is underneath the surface. If gas pipe, electric conduit, sewers, water mains, or other objects are in the area, get definite information of their location (blueprints, if possible) and avoid them carefully.

Wear safety shoes, goggles, and hard hats at all times. Also, wear ear protection.

Inspect the machine and equipment regularly, especially drill steel. Never use defective equipment.

Check valves and connections carefully. Be especially careful when laying down the tool that the trigger cannot be operated accidentally.

Thoroughly examine the slope and flare for loose rock.

Keep a good grip and watch your footing when drilling.

Never point a portable power hammer at anyone; never use the air hose as a means of practical joking.

Before disconnecting a portable pneumatic tool, always turn the air off at the base control valve.

If the job is near a sidewalk or other thoroughfare, place suitable screens to protect passersby from flying particles.

Never use compressed air to blow dirt, dust, or chips from hands, face, or clothing.

7.7.12 Handling Chemicals

Extreme care should be exercised at all times by personnel if working with acids, caustics, solvents, pesticides, or petroleum products. If questions arise, check with your supervisor.

No food or drink will be allowed in an area where potentially toxic substances are stored, mixed, or otherwise handled.

Be extremely careful to avoid spills or splashes when handling chemicals. Spilled chemicals must be removed immediately. Remove by flushing with water or other appropriate methods.

Wear protective goggles and clothing when contact may occur with chemicals.

If you contact caustic chemicals, take immediate action by flushing the affected part with water. If swallowed, check with chemical warning on the container and follow instructions.

All chemicals or other injurious materials must be stored in proper, approved containers. Antidotes and first-aid treatment methods will be attached to the container or otherwise readily available to all workers.

Gases — The gases and fumes formed in sewage plants create various hazards. When mixed in proper proportions with air, they can explode violently, causing serious fires. Sewer gases can also suffocate or poison men exposed to them. Gases originating in digester tanks and from the chlorine used in sewage treatment will also be carefully controlled. Sewers and pits free of harmful gases may still be dangerous because of the lack of oxygen.

Hydrogen Sulfide — Hydrogen sulfide is usually present in sewer lines and treatment plants. This gas is extremely toxic and explosive and is formed by the decomposition of sulfur containing proteins and organic compounds in untreated sewage.

Methane Gas — Methane gas, formed in digester tanks, is the result of decomposition of organic materials. Not only is it explosive and flammable, but methane gas displaces oxygen in confined or inadequately ventilated areas.

Carbon Dioxide — Carbon dioxide, an asphyxiating gas, is generated in large quantities in the sludge digestion process.

Digester Gas — The gases generated by digesting sewage sludge may be explosive, toxic, or suffocating. Before personnel are permitted to work in or around digester tanks, the air will be tested and adequate measures put into effect to minimize any hazards found to be present. In order to prevent the accumulation of dangerous gases, forced ventilation will be used, if necessary, when filling or emptying digester tanks.

Asphyxiants — Simple asphyxiants are mist gases such as methane, carbon dioxide, and hydrogen which displace oxygen in the air. Chemical asphyxiants are substances that combine with the hemoglobin of the blood or parts of tissues. Carbon monoxide is a typical example of a chemical asphyxiant.

Fire Hazard — Because of the possible presence of explosive and flammable gases, all electrical facilities in enclosed sewage treatment areas will be explosive proof. Steel or other spark producing tools will not be used in digester tanks or gas storage facilities until it has been determined that the air is free of explosive mixtures. When spark producing tools are being used in sewage treatment areas, continuous tests will be taken of the air to make certain no explosive gases are accumulating. Adequate firefighting equipment will be provided throughout the plant.

Chlorine — Chlorine containers will be stored in a separate room, equipped with a floor level forced air ventilating system discharging directly to the outside of the building. No other gases will be stored in the same room with chlorine containers, even when empty. Chlorine containers will be protected at all times from direct sunlight and heat. Only trained and authorized personnel will handle chlorine cylinders. Cylinder valves and fittings will be regularly checked for leaks which will be stopped immediately when detected. Wherever chlorine is used in sewage plants, two gas casks will be provided and stored outside of the chlorine room for emergency use in the event of leaking gas. Carbon monoxide from engine exhausts or other sources will not be permitted to mix with chlorine gas; deadly phosgene gas may be formed as a result.

Powdered Chlorine (HTH) — Employees handling powdered chlorine or HTH will be cautioned against putting this material into any type of metal or oily container. This product will be handled only in clean, plastic containers plainly marked "CHLORINE ONLY." All employees handling powdered chlorine or HTH will wear goggles, rubber gloves, and adequate clothing to protect themselves from any of this chemical coming into contact with the eyes and skin. Failure to follow these precautionary measures could result in painful and serious injury.

7.7.13 Ladder and Scaffold Safety

Never use a makeshift ladder; they cause more accidents than all other causes together.

Use the right length ladder for the job so you won't have to reach or work from an unsafe position.

Check for cracked or damaged side rails. Check for cracked, loose, or missing rungs, steps, or cleats.

Inspect for rough or splintered surfaces and loose, bent, or broken hardware, such as hinges, spreaders, or extension locks.

In setting up a ladder, place it so the distance between the foot of the ladder and the base of the structure is approximately 1/4 of the distance from the base to the point of bearing.

Make sure the feet are firmly and evenly supported.

Ladders leading to landings or hallways should extend 36 inches to 42 inches above the point of bearing.

Be sure that the stepladders are fully opened with the spreader locked. Place all legs at the same level on firm footing. Ladders with safety shoes are required. Never use any ladder or section of ladder that does not have required safety shoes. Never stand on top of any ladder.

Always face the ladder and use both hands when climbing or descending.

Setting Up Ladders

- A. In raising a long ladder, have someone hold the base, if possible; otherwise, tie the base or block it against something solid.
- B. Raise extension ladders to the vertical position (or against the wall) before extending. Leave ample overlap between sections: for extended lengths up to 38 feet, three feet; 38 to 44 feet, four feet; and 44 to 55 feet, five feet.
- C. Place the ladder feet parallel with the top support and on a solid footing.
- D. Set the ladder so that the side rails extend 3 ½ feet above a top landing.
- E. Tie the ladder or have someone hold it if used where likely to shift, on roofs or high places, or if the indicated angle cannot be observed.

Climbing Ladders

Most ladder accidents are caused by the ladder falling or the climber losing his balance and falling. Here are some important precautions:

- A. Make sure the ladder is not defective.
- B. Use a ladder with safety feet suitable for the floor or ground it stands on.
- C. If the floor is extra slippery, tie the ladder at the base or have someone hold it.
- D. If the ladder is placed before a doorway, lock the door or have someone guard it. Protect the ladder base from traffic, if necessary.
- E. When using a stepladder, make sure it is fully extended before you climb.
- F. If your shoes are muddy or otherwise slippery, clean them before you climb.
- G. Be sure the ladder is placed at a safe angle against the wall or other solid backing. An angle of about 75 degrees with the horizontal is recommended.
- H. Always face the ladder and hold on with both hands, whether climbing up or down.
- I. Carry tools in suitable pockets or have tools and all other objects hoisted with rope and bucket.
- J. Step toward the sides of a step. Do not place your weight in the center of a step.

Working From Ladders

- A. Make sure the ladder is without defects and is placed securely against solid backing at a safe angle of about 75 degrees with the horizontal.
- B. Clean mud or greasy substances from your shoes before climbing up to work.
- C. Face the ladder and hold on with both hands whenever climbing up or down. Carry tools in suitable pockets or hoist them with a rope.
- D. Work facing the ladder and hold on with one hand.
- E. Use a safety belt if the character of the work requires it.

- F. It is dangerous to reach out too far from a ladder in any direction; move the ladder as the work may require.
- G. Avoid the use of two ladders spliced together; get one long enough to reach the job.
- H. It is unsafe to use a ladder as a horizontal member of a scaffold.
- I. When using ladders on roofs or other high places, lash them securely. Do not work in a high wind.
- J. Use extreme caution when using tools requiring great force to operate. If a tool slips, you could be thrown from a ladder.

Stepladders

- A. Make sure the ladder has no defects.
- B. Open the ladder wide enough so that the spreader locks itself in the fully opened position. Avoid stepladders having rope or chain spreaders.
- C. If the ladder is placed before a doorway, lock the door or have someone guard it; protect the ladder base from traffic, if necessary.
- D. Place the ladder on a firm level base; if blocking is necessary, anchor both blocking and ladder or tip it in place.
- E. Set up the ladder so that you can reach your objective easily; never lean far out from a ladder in any direction.
- F. Avoid standing on the top of a stepladder; use a ladder tall enough to let you stand at least three steps from its top.
- G. Never use boxes or other makeshifts to increase the height of a ladder; never let the ladder be on loose or makeshift support.
- H. Tools should never be left on a stepladder unless tool holders are provided.

Lifting Safety

Back injury occurs more often than any other type of injury. While the back is an extremely complex structure and does a remarkable job, it is one of the weaker structures of the body. A large percentage of back injuries are caused by improper lifting.

The following steps will help avoid muscle twisting or more serious back problems.

- A. Plant feet firmly before the object to be lifted. Keep feet flat, a comfortable distance apart, pointing directly at the object.
- B. Squat down, grasp the load, keep back straight as possible, and lift with your legs.
- C. Be sure the load is balanced as much as possible so that an equal weight is held in both hands. An unbalanced load places unequal strains on the back muscles.
- D. Arrange the load or position yourself so that you will not have to twist while lifting. Lift the load straight up in front.
- E. Do not attempt to lift or move an object beyond your capabilities. Get help.
- F. Carry the load with a straight back. Bending backward or slumping forward means the load is too heavy to be carried safely. Get help.
- G. Lower the load as it is lifted, feet firmly placed and comfortably apart, back as straight as possible.
- H. Lower the load carefully to avoid pinched fingers.

7.7.14 Fire Safety

Throughout this handbook, fire prevention measures are given for various on-the-job activities. Observe them. In case of fire, **DO NOT PANIC . . . KEEP CALM**. It is extremely important to know the following information:

Know where and how to use fire extinguishers located in your work area.

Know and follow the evacuation plan of your work area. A large fire or explosion may necessitate a change in the plan. Keep calm and follow the instructions of the person(s) directing you to the safest exit.

Evacuation

- A. When evacuating a building, turn off (unplug, if possible) any electrical equipment in use, close all windows, turn off lights, and close all doors as you leave.
- B. Elevators are not emergency exits and should not be used in case of fire.

- C. WALK quickly to the exits. Once outside, move a safe distance away from the building to allow fire fighting equipment unhindered access to the building.
- D. Do not attempt to move vehicles away from the building unless so directed by your supervisor, fire, or police officials.
- E. Do not re-enter the building until fire officials declare it safe to do so.

What To Do in Case of a Fire

- A. Sound the alarm that evacuation may begin immediately.
- B. Call the fire department.
- C. If the fire is small, fight it.
 - (1) Keep near a door for your escape.
 - (2) Stay low out of heat and smoke.
 - (3) Aim extinguisher stream at the base of the fire.
 - (4) Stay outside of closets and small areas and shoot extinguisher stream in.
 - (5) When the fire is out, leave the area. Close the doors. The fire department will assure that the fire is out and the area safe to reenter.
 - (6) If despite your efforts, the fire increases or the smoke becomes increasingly thicker, leave the area. Close the doors. Do not take unnecessary chances.
- D. Protect yourself from heavy smoke by covering your mouth and nose with a cloth (wet, if possible) and move as close to the floor as possible.

Each Fire is Different

Use water extinguishers on paper, wood, and cloth fires.

Use dry chemicals or CO₂ extinguishers on gasoline, oil, grease, or other flammable chemicals and electric fires.

Electric Fires

- A. Unplug electrical equipment or turn off current at box.

- B. Use CO2 or dry chemical extinguisher. Never use water on an electrical fire. The potential of electric shock is too great.

Clothes Fires

- A. Do not let anyone whose clothes are on fire run. It fans the flames.
- B. Smother the fire by rolling the victim up in a rug or blanket, canvas (be sure the canvas has no oil or grease on it), or a heavy coat. Gently beat out the flames. As the victim is rolled in the smothering material, be sure his head is not covered up.
- C. Get medical attention for the victim immediately.

Car/Truck Engine Fires

- A. Shut off the engine and disconnect the battery, if possible.
- B. Use a dry chemical or CO2 extinguisher.
- C. BEWARE of spilled gasoline.

Outside Fires (Grass, Leaves, Brush, etc.)

- A. Rake, dig, or wet down a four foot wide "fire brake" between the fire and endangered buildings or equipment.
- B. Working along the edge of the fire, knock down flames with brooms, shovels, or water.
- C. Have someone follow up to put out sparks.
- D. Be especially cautious during windy weather.
- E. Do not take chances, always have an escape open.

REMEMBER the following:

- **KEEP CALM . . . DO NOT PANIC** but move quickly.
- Sound the alarm.
- Call the fire department.
- Evacuate the area.

- Fight a small fire. Use good judgment; do not endanger yourself or others. Your safety and the safety of fellow workers are foremost.

Fire Prevention Measures

- A. Do not empty ashtrays into wastebaskets at the close of a workday. Leave ashtrays on the desk or in a sink until the next morning. Wastebaskets are not ashtrays. Do not discard smoking materials into a wastebasket at anytime.
- B. Unplug electric coffee pots, hot plates, and like appliances at the end of each workday.
- C. Turn off electric typewriters and like electrical equipment when not in use and at the end of the workday.
- D. Avoid overloading electric circuits. If it is necessary to use triple or four-way sockets for commonly used electrical equipment in an office, then more circuits are needed.
- E. Extension cords can be hazards especially when stapled, run under rugs, or through doorways. Request additional circuits.
- F. Use portable electric heaters with great care. Avoid placing such appliances near combustibles. Unplug electric heaters at the end of the workday.
- G. Flammable cleaning fluids and gasoline for edgers and lawnmowers should not be stored in buildings occupied for offices, public assembly and like uses. Only enough fluids for immediate use should be kept on hand in work areas.
- H. Flammable liquids should be put and kept only in metal cans. Safety cans are recommended for gasoline.
- I. Be careful that light bulbs do not come into contact with combustibles in storage areas.

7.7.15 ISU Fire Safety Policies

INTRODUCTION

Idaho State University is committed to providing a fire-safe environment for the faculty, staff, students and visitors, and to protecting its property through an effective fire prevention, protection, preparedness and response program. The following policies are in effect to assist the University community in working together to maintain an environment that reduces the risk of fire hazards.

CANDLES/INCENSE/OPEN FLAME

Candles, incense, and other such items that have an open flame are not allowed in any University housing units and/or University offices on campus.

COOKING

No cooking is allowed in residence hall rooms or apartments where there are no kitchens. Appliances with open heating elements are a fire hazard and are not allowed (i.e. toasters, toaster ovens, hot cup coil warmers, electric stand-alone burners, electric skillets, etc.). This includes George Foreman grills and other similar appliances. Small microwaves (up to 1200 watts) and 3.6 cubic ft refrigerators are allowed.

HALOGEN LAMPS

Halogen lamps are not allowed in campus housing units.

HEATERS AND APPLIANCES

No heating units and appliances with open coils are allowed in campus housing units.

HOLIDAY DECORATIONS

Live Christmas trees are not allowed in the residence halls. Live trees are permitted in housing apartments provided the tree is treated with fire retardant spray, available from your Building Manager. Please call them to set up a time for tree spraying. Trees must be kept moist by adding water to the base daily.

SMOKING

Smoking inside any residence hall room or apartment is prohibited. Smoking is also prohibited in indoor common areas, walkways and balconies. Smoking must occur in designated smoking areas and/or at least 30 feet from a building entrance. There is no smoking within 30 feet of any apartment entrance or office entrance way. If a student smokes in a non-designated smoking area, apartment or room, sanctions and fines may be imposed.

FOR ALL OTHER UNIVERSITY BUILDINGS

Appliances shall be installed and maintained, as per their listing, so as not to create a hazard. Heating appliances shall have tip over protection. Flammable/combustible materials shall be kept away from appliances or other like items that produce heat or flames during their normal operation.

Refrigerators/freezers shall be defrosted periodically to prevent ice build up that could cause the compressor to heat up and cause a motor/compressor fire.

The use of natural or resin-bearing trees in university buildings shall be in accordance with the Idaho Department of Building Safety's Fire Safety regulations. Electrical decorations on trees shall be listed.

In compliance with Executive Order 2005-10 (Establishment of Non-Smoking Policy in State Buildings), issued by the Governor, Idaho State University prohibits smoking in all buildings leased, owned, or controlled by the University, except in designated areas.

FIRE SAFETY EQUIPMENT/SMOKE DETECTORS

Smoke detectors are installed in all housing rooms and fire extinguisher training is required for resident assistants and building managers. Tampering with fire safety equipment, including emergency exit signs, fire extinguishers pull stations, and smoke detectors (i.e. covering the smoke detector or removal of batteries), is prohibited. Sanctions and fines may be imposed.

A list of Fire Safety Equipment for all housing facilities and all other university buildings can be found at the following link: (coming soon)

FIRE EVACUATION PROCEDURES/DRILLS

Fire evacuation procedures are posted in all ISU buildings. For your safety and the safety of others, please familiarize yourself with them and follow them.

Fire extinguisher training is required for resident assistants. Fire drills in housing units will be held regularly by the 15th day of each academic year. Fire drills for all other campus buildings will be held each academic year.

Each residence hall and apartment complex will have a designated fire evacuation meeting area outside of the housing unit. Resident Assistants and Building Managers will be responsible for collecting names of individuals present at those areas and presenting the information to Public Safety or other emergency response personnel. Designated evacuation locations are available at each front desk, building manager office and the Housing Office.

FIRE SAFETY VIOLATIONS

Any student found in violation of the Fire Safety Policy may be removed from University Housing (if applicable), referred to the Dean of Student Affairs, suspended from the University, and/or prosecuted through civil authorities. Any faculty/staff member found in violation of the Fire Safety Policy may be referred to Human Resources and/or prosecuted by civil authorities.

7.7.16 Fire Watch Policy

Purpose

This policy outlines the requirements of a fire watch if the fire alarm and/or fire suppression systems in any University building become inoperative.

This policy will apply to any situation in which a fire suppression system (e.g., building sprinkler system) or fire alarm and detector system is disabled (referred to in this policy as a “system interruption”). Such systems may be disabled because of emergencies, such as power outages or broken water lines, or due to vandalism, repeated false alarms, construction projects or system malfunctions.

Reporting Procedures

The following procedures will be followed in the event of a system interruption in any campus building:

1. Facilities Services electricians will notify Public Safety and the Facilities Services Director when a fire alarm and/or sprinkler system is inoperative or impaired due to maintenance, construction or any other reason.
2. Public Safety will notify the following if a fire watch is implemented:
 - a. Facilities Services Director (if not already notified)
 - b. Housing Director, when in any housing facility
 - c. Pocatello Fire Department
 - d. building occupants (in person and through posting of signage)
 - e. all dispatchers and all officers
3. A fire watch will be established in a building when the fire alarm and/or sprinkler system is shut down more than 4 hours.
4. The Facilities Services Director, Dean of Students or Housing Director will coordinate with Public Safety to utilize building or other university staff to establish a fire watch.
5. Facilities Services electricians will notify Public Safety when the system has been restored and Public Safety will notify fire watch personnel, building occupants and the Pocatello Fire Department when the fire watch is ended.

Fire Watch Procedures

A fire watch will be established in a building when the fire alarm and/or sprinkler system is shut down or inoperative more than 4 hours.

The decision to implement a fire watch will be determined jointly by Facilities Services, Public Safety and the Pocatello Fire Department.

In housing units a fire watch is required at all times when the units are occupied. Public Safety will notify Housing and the Dean of Students when a fire watch needs to be implemented.

In buildings other than housing units, a fire watch will be required during normal business hours. Outside normal business hours, the need for a fire watch will be determined jointly by Facilities Services, Public Safety and the Pocatello Fire Department.

Anyone working on a fire suppression system must give Facilities Services sufficient time to establish a fire watch and notify Public Safety.

Facilities Services and Public Safety will ensure that there are personnel to perform fire watches in all buildings. In housing units that are occupied, Housing staff may be used to perform the fire watch.

Contractors will be responsible for implementing a fire watch for impairments caused by construction work.

Fire watch personnel are to be familiar with the building, evacuation procedures for the building, and procedures for sounding an alarm in the event of a fire.

Fire watch personnel will remain vigilant at all times and are not permitted to perform any other duties during the fire watch.

The number of personnel involved in the fire watch should be adequate enough to watch for fires in all occupied areas of the building.

Fire watch personnel are to remain in the building whenever it is occupied.

Fire watch personnel will conduct an hourly check of each floor in order to detect any signs of smoke, fire or any other life safety hazard that might exist.

In a building where the alarm system is not functioning, fire watch personnel will be provided with a bull horn or other loud device with which to notify the building occupants in the event of a fire or other emergency. They will also carry a Public Safety radio or cell phone with which they can contact emergency personnel, if necessary.

In the event of an emergency, fire watch personnel will contact Public Safety immediately and direct occupants to the nearest safe exit.

Fire watch personnel are not required to fight fires and may only use a fire extinguisher if trained to do so and if the fire is the size of a small wastebasket or smaller.

Fire watch personnel will be provided with instructions and the necessary equipment or materials to perform their duties.

Fire Watch Personnel Checklist

<input type="checkbox"/>	Copy of Evacuation Procedures and Floor Plan for Building.
<input type="checkbox"/>	Radio and/or cell phone to make emergency contacts.
<input type="checkbox"/>	Bull horn, whistle or other loud device to notify occupants in building of a fire or other emergency, if necessary.
<input type="checkbox"/>	ID to identify you as Fire Watch Patrol.
<input type="checkbox"/>	Received instructions on use of fire extinguisher, if necessary to use.
<input type="checkbox"/>	Received instructions on use of pull stations (if operable).
<input type="checkbox"/>	Fire Watch Log (To be turned into Facilities Services at end of fire watch.
<input type="checkbox"/>	
<input type="checkbox"/>	
<input type="checkbox"/>	

Fire Watch Duties

Personnel serving as a fire watch will perform the following duties:

1. Conduct patrols of the interior of the entire facility as specified on an hourly basis.
2. Identify any fire, life or property hazards.
3. Determine at least one means of direct communication with Pocatello Fire Department and Public Safety. A telephone is preferable.
4. Maintain a log of fire watch activities (log sheet is attached).
5. Have knowledge of the location and use of the fire extinguishers.

Actions in case of fire or odor of smoke:

1. Notify the Pocatello Police Department if a fire is discovered by calling 911, then Public Safety at 282-2515 and give the exact address and type of emergency.
2. Notify the occupants of the facility of the need to evacuate. If the sirens or public address function of the alarm system are still functional, use them to assist with the evacuation of the building.
3. Fire watch personnel cannot have other duties beside their assigned fire watch. NOTE: Fire watch personnel will not perform fire-fighting duties beyond the scope of the ordinary citizen.

Fire Watch personnel will patrol the entire facility every 15 minutes in the following situations:

1. The facility has occupants sleeping.
2. The facility is an institutional occupancy.
3. The facility is an occupied assembly place (i.e., events at PAC, Holt, Frazier, etc.)

Fire watch personnel shall maintain a fire watch log (see attached) that will be turned into Facilities Services at the end of the fire watch.

7.7.17 Lead Base Paint Abatement

- Before any demolition the area must be isolated with 6 ml plastic.
- Prepare decontamination area.
- Place negative air equipment.
- Identify storage area for tools and personal protective equipment within the isolated area.

Respirator

Filters

Coveralls

Gloves

HEPA vacuum

Mist spray device

6 ml plastic

- Small projects of short duration, in which the work would be completed in eight hours or less, may not need to be isolated if the furnishings and office items could be moved to another or sealed with poly/drop cloths. The HEPA vacuum should be used as needed.

7.7.18 Sewer Line Breaks or Back-ups

Precaution: Safety clean-up for maintenance and custodial staff

Follow these instructions:

1. Find out what it is and where it is located.
2. Determine what equipment is needed to clean it up
 - * disposable rubber gloves
 - * paper towels
 - * mops
 - * bucket
 - * 10% bleach solution
 - * dust pan
 - * broom
 - * water proof rubber boots
 - * safety glasses
 - * disposable coverall
3. Clean up all of the spill possible.
4. Disinfect boots, glasses, and other non-disposable items.
5. Dispose of all disposable clothing and items properly.

8.0 Blood & Body Fluids

Infectious wastes are defined in ATOPY 16.02.1002,19 “Rules Governing Hospitals” as:

- A. Cultures and stocks of infectious agents and associated biologicals including:
 - 1. Specimens from medical and pathology laboratories;
 - 2. Wastes from production of biologicals (by-products from the production of vaccines, reagents in the laboratory, etc.);
 - 3. Cultures and stocks from clinical, research and industrial laboratories, such as disposable culture dishes and devices used to transfer, inoculate and mix cultures.
- B. Human blood and blood products (fluid form) and their containers, and liquid body wastes (fluid form) and their containers.
- C. Pathologic waste including tissue, organs, body parts, autopsy and biopsy materials, unless such waste has been treated with formaldehyde or other preservative agents.
- D. “Sharps” including needles, syringes, scalpel blades, pipettes, lancets, or glass tubes that could be broken during handling.
- E. Animal carcasses which have been exposed to pathogens, their bedding and other waste from such animals.
- F. Items contaminated with blood or body fluids from patients known to be infected with diseases transmitted by body fluid contact.

According to the same regulations, infectious waste must be treated prior to disposal. The definition of treatment is as follows:

- A. Incineration in an incineration facility approved and permitted in accordance with the current requirements of the Idaho Air Quality Bureau. Incinerators shall be capable of providing proper temperatures and residence time to ensure destruction of all pathogenic organisms.
- B. Sterilization by heating in a steam sterilizer utilizing saturated steam within a pressure vessel (known as a steam sterilizer, autoclave, or retort) at time lengths and temperatures sufficient to kill infectious agents within the waste. Operating procedures shall include, but are not limited to, standards for temperature settings, residence times recording or operational procedures and results, and periodic testing by treatment indicators.

- C. Discharge of liquid or semi-solid waste into a sanitary sewer that provides secondary treatment of waste.
- D. Infectious Waste
 - 1. One of several less commonly used methods such as chemical disinfection, thermal inactivation, gas-vapor sterilization or irradiation. Efficacy of the method shall be demonstrated by the development of a biological testing program, e.g., spore strips. Monitoring shall be conducted on a periodic basis using appropriate indicators.

Disposal - Defined as, “The final placement of treated waste in a properly permitted landfill.”

Under the Idaho Solid Waste Management Regulations and Standards, infectious waste falls under the definition of “Hazardous Solid Waste” under 1-6003.12. In section 1-6008.16, “Disposal of hazardous waste shall not be permitted in a sanitary landfill until the methods of disposal, suitability of the site, and plan of operation have been approved and a conditional use permit has been issued. When possible, all toxic and hazardous wastes shall be neutralized or otherwise made harmless prior to disposal.”

Currently, infectious waste is disposed of at the landfills in the District. Whether it is treated prior to disposal at all facilities is not known. Quantities are also not known.

Future Disposal

Future infectious waste management in the Southeastern District Health Department may be affected by local projects and state and federal regulations.

Currently, an infectious waste incinerator is close to coming on line in the Salt Lake City area. This facility is proposing receiving infectious waste from the Southeast Idaho area. In addition, similar facilities have been proposed in Power, Bannock, and Caribou counties. However, these facilities have proposed taking only infectious waste from Washington, Oregon, and Northern California. Any of these projects could have a dramatic effect on disposal of infectious waste in Southeastern Idaho.

If a regional incinerator is sited in Southeastern Idaho, the problem of adequate ash disposal becomes an issue. The ash would be tested in accordance with EPA regulations, and a determination made whether it is considered a hazardous waste or not. If considered hazardous, the ash will be required to be transported to and disposed of in a Subtitle “C,” or hazardous waste landfill. However, if not considered a hazardous waste, the ash will have to be disposed of in a sanitary landfill. Currently, Idaho State regulations permit disposal of incinerator ash in a sanitary landfill.

Federally, the Clean Air Act may dictate that incinerator ash be disposed of in a landfill that is lined and has a leachate collection system. It may also require that ash be deposited in a monofill (ash only). For the proposed facilities, upwards of 15-20 tons of ash per day would require disposal.

Infectious waste transported out of state for incineration will most likely end up with the ash being land filled in that state where the incinerator is sited.

Information on bio-hazardous waste can be found in the **Federal Register, Vol. 56, No. 235, Friday December 6, 1991, Rules and Regulations.**

9.0 Motor Vehicles

All employees, as a condition of employment, are required to follow the instructions combined in this section.

9.1 Responsibilities of University Drivers

Regardless of the employee's classification and whether or not a University employee drives a University-owned vehicle eight hours a day or just occasionally, they are required to complete a four-hour National Safety Council approved **Defensive Driving Course** that is renewable every two years, unless involved in a preventable accident, in which case the employee will attend the next available Defensive Driving Course. Responsibility also lies in proper care and operation of that vehicle and for proper parking of it. Every employee who drives a University-owned vehicle is responsible for obeying all traffic laws and for compliance with the rules set forth in this manual.

9.1.1 Driver's or Chauffeur's License

A current state driver's or commercial driver's license must be in an employee's immediate possession at all times when he is driving a University-owned vehicle. An employee must first take a driver's written and road test from the Safety Director of Idaho State University or a designee.

If an employee does not have a current or valid Idaho driver's or commercial driver's license, he will not drive a University-owned vehicle. An employee whose job requires him to operate vehicles may have his employment terminated in the event his license is revoked or suspended by a court of a law enforcement agency.

9.1.2 Inspection of Vehicle

Before operation, the driver will check his vehicle for any damage to the body or interior that may have occurred since the last time the vehicle was driven. He will also check the following items, parts, and accessories to determine that they are in satisfactory condition or good working order:

- (1) Service brakes and parking brakes.
- (2) Lights (front, rear, brake) and turn signal lamps.
- (3) Horn and windshield wipers.

- (4) Tire pressure and tread.
- (5) Steering mechanisms.
- (6) Rear view mirror or mirrors.

The driver is also responsible for assuring that proper oil level is maintained in the vehicle and that water is added to the radiator and/or battery whenever needed. These items should be checked each time fuel is added to the vehicle.

Any defects noted which would affect the safe operation of the vehicle will be reported to the driver's supervisor and/or the vehicle maintenance shop for correction before the vehicle is used.

9.2 Uses of University-Owned Vehicles

University owned vehicles are to be used only for transacting matters relating to official University business. They will not be used by employees for personal reasons. Employees who use assigned vehicles on a 24-hour basis will drive such vehicles directly home after work and leave them parked there until needed for "call-out."

Transporting Persons in University-owned Vehicles — A driver will not transport persons other than on-duty University employees in a University-owned vehicle unless the persons are being transported in connection with official University business, law enforcement matters, or as authorized by a supervisor.

Transporting Equipment or Property — When items of equipment, property, supplies, etc., are being transported, the driver will assure that all items are properly secured or tied in place to prevent them from shifting or falling from the vehicle.

Driving by Unauthorized Persons — Except in a case of an emergency, a driver will not allow a vehicle which he has been assigned to be driven by any person not authorized to drive a University-owned vehicle.

Riding on Fenders, Hoods, or Running Boards — No person will be allowed to ride on running boards, fenders, hoods, tailgates, or rear racks of vehicles except fire trucks and garbage trucks which do not have jump seats.

Obstruction to Driver's View — No driver will drive any vehicle when it is so loaded that it obstructs his view ahead, to the right or left side, or interferes with his control over the driving mechanism of the vehicle. No more than three people will ride in the front seat of a vehicle at one time.

Opening and Closing Vehicle Doors — No person will open the door of a vehicle on the side available to moving traffic unless and until it is reasonably safe to do so, nor will any person leave a door open on the side of a vehicle available to moving traffic for a period of time longer than necessary to load or unload passengers.

Unattended Vehicles — No person driving or in charge of any motor vehicle will permit it to be unattended without first stopping the motor, locking the ignition, removing the key, effectively setting the brake thereon, and when standing upon any grade, turning the front wheels to the curb or side of the roadway.

Striking Unattended Vehicles — If a moving vehicle strikes a vehicle standing or unattended or other property, the driver will immediately stop and endeavor to locate custodian or owner. If he is unable to do so, he will place securely and conspicuously his name and address on the damaged property. A police report will be made by the approved police department which has jurisdiction.

Flags on Projected Loads — Any vehicle having a load which extends more than four feet beyond the rear will have the end of the load marked with a red flag which will be at least a 12 inch square.

Coupling Devices — A driver whose vehicle is towing a trailer, dolly, or other equipment will assure that the trailer hitch is securely latched and that safety chains are properly attached.

Drivers of Emergency Vehicles — The driver of an emergency vehicle may exercise the privileges set forth in the following subparagraph when: (1) responding to a fire alarm or responding to an emergency call; or (2) when in pursuit of an actual or suspected violation of the law.

The driver of an emergency vehicle may:

- (1) Park or stand the vehicle irrespective to the provisions of this manual;
- (2) Proceed past a red or stop signal or stop sign, BUT only after slowing down or stopping as maybe necessary for the safe operation;
- (3) Exceed the maximum speed limits so long as he does not endanger life or property;
- (4) Disregard regulations on governing the direction of movement of turning in specified directions.

The exemption herein granted to the driver of an emergency vehicle will apply only when such vehicle is making use of audible and visual signals sufficient to warn motorists of their approach as outlined in Idaho State Code Section 49-606.

The driver of an authorized emergency vehicle, when responding to an emergency call or when in the pursuit of an actual or suspected violator of the law or when responding to but not upon returning

from a fire alarm, may exercise the privileges set forth in this section, but subject to the conditions herein stated.

The driver of an authorized emergency vehicle may:

- (a) Park or stand, irrespective of the provisions of this chapter;
- (b) Proceed past a red or stop signal or stop sign, but only after slowing down as may be necessary for safe operation;
- (c) Exceed the speed limits so long as he does not endanger life or property.
- (d) Disregard regulations governing direction of movement of turning in specified directions.

The exemptions herein granted to an authorized emergency vehicle will apply only when such vehicle is making use of an audible signal having a decibel rating of at least 100 at a distance of ten feet and/or is displaying a flashing light or lights visible in a 360 degree arc at a distance of 1000 feet under normal atmospheric conditions or both. Only a police vehicle operated as an emergency vehicle will display at least one blue light and all other authorized emergency vehicles will display at least one red light meeting the above visibility requirements.

The foregoing provisions will not relieve the driver of an authorized emergency vehicle from the duty to drive with due regard for the safety of all persons, nor will such provisions protect the driver from the consequences of his recklessness disregard for the safety of others.

Alcoholic Beverages or Narcotic Drugs — No person will drive or be required or permitted to drive a University-owned vehicle while under the influence of any alcoholic beverage or narcotic drug.

Obstructing Traffic for Work Requirements — Whenever work requirements make it necessary for a University-owned vehicle to block or obstruct traffic, the driver will place warning signs and/or traffic cones to warn oncoming motorists of the obstruction. Warning signs will be placed far enough from the standing vehicle to give oncoming motorists adequate time in which to stop safely. Distance should be determined by: (1) street and weather condition; (2) speed limits in the area; and (3) whether the vehicle is standing on a straight or curved roadway. Vehicles so equipped will use revolving red lights or blinkers as additional warning devices. Exceptions will be made for emergency vehicles.

Seat Belt — All occupants of a University-owned vehicle are required to wear a seatbelt when the vehicle is in motion.

9.3 Traffic Rules and Regulations

9.3.1 Speed Limits

It will be unlawful for any person to drive or operate any vehicle on the streets of the Idaho State University at a rate of speed greater than 25 miles per hour unless signs or markings have been installed indicating a greater permissible rate of speed.

Where signs or markings have been duly installed indicating a greater or lesser permissible speed than 25 miles per hour, it will be unlawful to drive or operate any vehicle in violation of such signs or markings.

No person will drive a vehicle at a greater speed than is reasonable and prudent under the conditions and potential hazards then existing, having due regard for the traffic on, and the surface and width of the roadway, and the condition of the weather.

9.3.2 Stop Signs and Yield Signs

Stop Signs — A driver approaching a stop intersection indicated by a “STOP” sign will bring his vehicle to a complete stop. After having stopped, the driver will yield the right-of-way to all vehicles which have entered the intersection from another roadway or which are approaching so closely on said roadway as to constitute an immediate hazard.

Yield Signs — The driver of a vehicle approaching a “YIELD” sign will slow down to a speed reasonable for the existing conditions or will stop if necessary. Having slowed or stopped in this manner, the driver will yield the right-of-way to any vehicle in the intersection or approaching on another roadway too closely as to constitute an immediate hazard.

9.3.3 Driving on Right Side of Road

The driver will drive his vehicle on the right side of the street except when overtaking and passing another vehicle or when traveling on a one-way street.

9.3.4 Overtaking and Passing Another Vehicle

The driver of the vehicle overtaking and passing another vehicle will be responsible that the passing movement can be completed safely. He should be sure that the driver of the vehicle being overtaken is aware that he is being passed, sounding the horn if necessary. The driver must be alert for unexpected changes in direction of the vehicle being passed.

Except when overtaking and passing to the right is permitted, the driver of a vehicle overtaking another vehicle will pass to the left thereof and will not again drive to the right side of the road until safely clear of the overtaken vehicle.

The driver of a vehicle may overtake and pass upon the right of another vehicle only under the following conditions: (1) when the vehicle being overtaken is about to make a left turn; (2) upon a one-way street; and (3) upon a multiple lane street or highway. Overtaking and passing on the right may be made only under conditions permitting such movement in safety. In no event will such movements be made by driving off the pavement or main traveled part of the street.

9.3.5 Limitations on Passing on the Left

No vehicle will at any time be driven to the left side of the roadway under the following conditions:

- A. When approaching the crest of a grade or upon a curve in the highway, where the driver's view is obstructed within such a distance as to create a hazard in the event another vehicle might approach from the opposite direction.
- B. When approaching within 100 feet of or traversing any intersection or railroad grade crossing.
- C. When the view is obstructed upon approaching within 100 feet of any bridge, viaduct, or tunnel.

The foregoing limitations will not apply upon a one-way street or a multiple lane street.

9.3.6 No-Passing Zones

Where signs or markings are in place to define no passing zones, no driver will at any time drive on the left side of the roadway within such zone or pass on the left side of any pavement stripping designed to mark such no passing zone throughout its length.

9.3.7 One-Way Streets

Upon a street designated and signposted for one-way traffic, a vehicle will be driven only in the direction designated, and a vehicle will be driven nearly as practicable entirely within a single lane of traffic and will be moved from such line of traffic until the driver has first ascertained such movement can be made with safety.

9.3.8 Multiple-Lane Streets

Whenever any streets have been divided into two or more clearly marked lanes for traffic, a vehicle will be driven as nearly as practicable entirely within a single lane. A driver will not weave in and out of traffic. If necessary to change lanes because of overtaking and passing another vehicle or for turning, the driver will assure that he can do so safely before the change is made.

9.3.9 Overtaking and Passing School Buses

The driver of a vehicle meeting or overtaking, from any direction, a school bus which has stopped or is about to stop on the street for the purpose of receiving or discharging any school children will stop his vehicle before reaching the school bus when the bus is displaying a visual signal indicating STOP. The driver will not proceed until the bus resumes motion or is signaled to do so by the school bus driver or the visual signs are no longer actuated.

The driver of a vehicle upon a (divided) highway with separate roadways need not stop if the stopped school bus is on a different roadway or when upon a controlled access highway and the school bus is stopped in a loading zone which is a part of or adjacent to such highway and where pedestrians are not permitted to cross the roadway.

9.3.10 Following Vehicles

The driver of a vehicle will not follow another vehicle more closely than is reasonable and prudent, having due regard for the speed of the vehicle, traffic volume, and the condition of the roadway. An easy way is to use the "Two Second Rule" to make sure that you have the correct following distance. If a vehicle operator stays two seconds behind the car in front, you will have the correct distance no matter what your speed. (Example: Watch the vehicle ahead pass some definite point on the street or highway, such as a tar strip or overpass. Then count to yourself, "one thousand and one, one thousand and two." If you reach the mark before you finish saying those words, you are following too closely.)

The driver of a motor truck, when traveling upon a highway outside a business or residential district, will not follow another motor truck within 400 feet, but this will not be construed as to prevent one motor truck from overtaking and passing another.

9.3.11 Required Position and Method of Turning

In preparing for turning movements, the driver will position his vehicle in the proper lane at least 100 feet before reaching the place he intends to complete the turn.

The driver of a vehicle intending to turn at an intersection will proceed as follows:

Right Turn — The driver will start and complete a right turn as close as is practical to the right hand curb or edge of the roadway.

Left Turn from a One-Way Street — The driver will start and complete his turn as close as is practical to the left hand curb or edge of the roadway.

Left Turn from Two Way or Multiple Lane Street — The driver will approach intersection just to the right of the center line of the roadway. The driver will yield the right-of-way to all oncoming vehicles and will complete the turn only when it is safe to do so.

9.3.12 Required Signals

Whenever a driver intends to make a right or left turn, change lanes, slow down, or stop, he will give a signal of such intention either by the use of turn signals, brake lights, or hand and arm signals. Signals for a right turn will be given continuously during not less than the last 100 feet traveled by the vehicle before turning.

When the vehicle is not equipped with turn signal lamps in working order the driver will be required to give arm and hand signals as follows:

Left Turn — Hand and arm extended horizontally, with the hand open and the back of the hand to the rear.

Right Turn — Hand and arm extended upward at an angle of 45 degrees from shoulder to elbow, with hand open and the back of the hand to the rear.

Stop or Decrease Speed — Hand and arm downward at an angle of 45 degrees from shoulder or elbow, with the hand open.

Pulling from the Curb — Same as left turn.

9.3.13 Vehicle Entering Street

The driver of a vehicle about to enter or cross a roadway from a private road, driveway, alley, or building will stop such vehicle immediately prior to driving onto the sidewalk or onto the sidewalk area extending across any alleyway or driveway and will yield the right-of-way to any pedestrian and all approaching vehicles so close as to constitute a hazard.

9.3.14 Approach of Emergency Vehicle

Upon the immediate approach of an unauthorized emergency vehicle making use of audible and visual signals or of a police vehicle properly and lawfully making use of an audible signal only, the driver of every other vehicle will yield the right-of-way and pull over as far to the right as practical, stop, and remain stopped until all emergency vehicles have passed, except as otherwise directed by a police officer.

This section will not operate to relieve the driver of an emergency vehicle from the duty to drive with due regard for the safety of all persons using the roadway.

9.3.15 Parking

Except as otherwise provided below, every vehicle standing or parked on a street will be so standing or parked with the right hand wheel parallel to the right hand side of the street and within 18 inches of an adjacent curb.

On a one-way street, a vehicle may be parked on the left hand side of the street with the left wheels parallel to and within 18 inches of an adjacent curb.

The above requirements for wheels to be parallel to curbs will not apply to parking spaces which are at an angle to the curb.

The vehicle driver is responsible that his vehicle is properly and legally parked and, if left unattended, he stops the motor, removes the key, and sets the parking brake.

9.3.16 Prohibited Parking Places

Except when necessary to avoid conflict with other traffic, in compliance with law, following directions of a police officer or a traffic control device, no person will stand or park a vehicle in any one of the following places:

1. On a sidewalk.
2. In front of a public or private driveway.
3. Within an intersection.
4. Within 15 feet of a fire hydrant.
5. On a crosswalk.
6. Within 20 feet of a crosswalk at an intersection.
7. Within 20 feet upon the approach of any flashing beacon stop sign or traffic control signal located at the side of a roadway.
8. Within 50 feet of the nearest rail of a railroad crossing. Within 20 feet of the driveway entrance to any fire station and on the side of a street opposite the entrance to any fire station within 75 feet of said entrance, when properly posted.
9. Alongside or opposite any street excavation or obstructions when stopping, standing, or parking would obstruct traffic.

10. On the roadway side of any vehicle stopped or parked at the edge or curb of a street.
11. Upon a bridge or other elevated structure on a roadway.
12. At any place where official signs or markings prohibit such.
13. Any place where official signs obscure or obstruct visibility of any traffic control device.

9.3.17 Obedience to Traffic Control Devices

The driver of a vehicle will obey the instructions of any traffic control device unless otherwise directed by a traffic or police officer, subject to the exceptions granted the driver of an authorized emergency vehicle elsewhere in this manual.

9.3.18 Traffic Control Signals

Whenever traffic is controlled by traffic control signals exhibiting the words "GO," "CAUTION," or "STOP," or exhibiting different colored lights successively at a time or with arrows, the following colors only will be used and said terms and lights will indicate and apply to drivers of vehicles and pedestrians as follows:

Green Alone or Go — Vehicular traffic facing the signal may proceed straight through or turn right or left unless a sign at such place prohibits either such turn, but the driver will yield the right-of-way to other vehicles and to pedestrians already in the intersection at the time such signal is exhibited.

Steady Yellow or Amber Alone — Vehicular traffic facing the signal is thereby warned that the red or "STOP" signal will be exhibited immediately thereafter, and vehicles will not enter or be crossing the intersection when red or "STOP" signal is exhibited.

Steady Red Alone or Stop — Vehicular traffic facing the signal will stop before entering the crosswalk on the near side of the intersection or, if none, then before entering the intersection and will remain standing until Green or "GO" is shown alone. A driver may turn against a steady red light where a sign indicates this is permissible, provided he has yielded the right-of-way to other vehicles and pedestrians and can execute the turn safely.

Steady Red with Green Arrow — Vehicular traffic facing such signal may cautiously enter the intersection only to make the movement indicated by such arrow but will yield the right-of-way to pedestrians in the crosswalk and to other traffic using the intersection.

9.3.19 Flashing Signals

Whenever an illuminated flashing red or yellow signal is used in a traffic sign or signal, it will require obedience by vehicular traffic as follows:

Flashing Red (Stop Signal) — When a red lens illuminated with rapid intermittent flashes, drivers of vehicles will come to a complete stop. After having stopped, the driver will yield the right-of-way to all vehicles which have already entered the intersection or which are approaching so closely as to constitute an immediate hazard.

Flashing Yellow or Amber (Caution Signal) — When a yellow lens is illuminated with rapid intermittent flashes, drivers will reduce speed and proceed through or past such signal only with caution.

9.3.20 Backing of Vehicles

Whenever possible, the driver will position his vehicle so as to avoid the necessity of backing later. Before entering the vehicle, the driver will check the rear clearance of the vehicle. The driver will not back the vehicle unless such movement can be made with reasonable safety and without interfering with other traffic.

The driver of a garbage truck or similar large vehicle with an obstructed view to the rear will not back such vehicle unless an observer signals that it is safe to do so.

Before and during backing movements, the driver will: (1) check blind zones for objects not visible in rear view mirrors; (2) watch both sides for proper clearance; and (3) back very slowly.

9.4 Vehicle Accidents

9.4.1 Definition of Vehicle Accidents

A vehicle accident is defined as an occurrence in which the University-owned vehicle comes into contact with another vehicle, a person, an object or an animal which results in death, personal injury, or property damage, regardless of who was injured, what property was damaged, or to what extent, where it occurred or who was responsible.

9.4.2 Procedures When Accidents Occur

When a University-owned vehicle is involved in an accident, the following procedures will be followed:

Whenever the operator of a University-owned vehicle is involved in a vehicular accident on a city street, the police department of jurisdiction will be immediately notified and a police officer will be summoned to the accident scene to investigate and complete an accident report. All accidents that occur on ISU property will be reported to Public Safety.

If the driver is unable to complete the accident report because of disability, his supervisor will complete the report for him.

When involved in an accident, the University driver should follow these procedures:

- (1) Stop the vehicle at once.
- (2) Render all possible aid to the injured at once and send for an ambulance.
- (3) Notify the supervisor or designated departmental person and the police.
- (4) Protect the public by warning oncoming motorists so as to prevent additional accidents.

In the event of an accident involving a University owned vehicle where there is serious injury, extensive property damage, or a death, the Pocatello Police Department Traffic Accident Investigator will be called to the accident scene to process the investigation and complete the follow-up investigation report.

Employees will cooperate fully with officials investigating the accident.

Incidents involving vandalism to University-owned vehicles will be reported to the police department for investigation.

All operators of University-owned vehicles will be held responsible for the safe operation and proper reporting of all accidents and known damage to vehicles of which they are assigned.

Incidents involving theft of or from University-owned vehicles will be reported to the police department for investigation.

Operators of University-owned vehicles involved in an accident will make no statement as to responsibility and will not advise other parties involved that the University will pay for the damage resulting from said accident.

Employees will fully cooperate with investigating officials.

Employees will complete all forms, statements or diagrams requested by investigating officials.

The Public Safety Director will insure that copies of police department reports on University-owned vehicle accidents are completed by the Safety Coordinator, and maintained in a file.

9.4.3 Accident Review Board

Whenever an employee is involved in a vehicle accident while operating a University-owned vehicle, he will be required to appear before an Accident Review Board for a determination as to whether or not the accident was preventable or non-preventable on his part.

9.4.4 Purpose of Accident Review Board

To establish a fair and impartial review system for all accidents involving motorized equipment and operators with the primary objective being to improve the driving safety of University-owned motorized vehicles.

To identify problem drivers, unsafe conditions, and pursue remedial steps to reduce damage to vehicles.

To establish the responsibility for each vehicle accident.

To establish eligibility of University drivers and operators for safe driving recognition.

To establish uniformity of discipline.

9.4.5 Composition of Accident Review Board

The Accident Review Board will be composed of University employees. The Safety Director will serve as the Chairperson of the Board which will meet as needed.

The University Accident Review Board will review all vehicle accident reports of University-owned vehicles and/or equipment where property damage, personal injury, or death occurs if it is deemed necessary by the Board. The employees who are involved in such accidents will be notified in writing by the chairperson of the Accident Review Board hearing. The employee may appear and give his testimony and present any witnesses if he so desires. The Board may also call any witness.

9.4.6 Appearance Before the Board

Approximately five working days prior to a regularly scheduled Board meeting, the Board secretary will notify all University personnel scheduled to appear before the Board via the Department Head. Considering the vast assortment of job responsibilities throughout the University, the following guidelines are suggested.

1. Personnel unable to appear before the Board at its regularly scheduled meeting must notify the Safety Director's secretary 24-hours in advance. He will be rescheduled to appear on the following month. Unless authorized by his Department Head, in writing, no individual will be excused from appearing two meetings in succession.
2. Other than those cases which have been deferred, all vehicle accident cases scheduled will be heard and recommendations given whether or not the individual is present. Department Heads and the employees concerned will be notified of the recommendations of the Board.

3. Any driver/operator whose accident is being reviewed, may attend the Board meeting. However, in his absence, a recommendation based on available information will be made. It is, therefore, important that every accident report be complete and accurate.

9.4.7 Preventable Accident Guides

The definition of a preventable accident is as follows: "Any vehicle, unless properly parked, involved in an accident which results in personal injury or property damage in which the driver failed to do everything he could have done to prevent or avoid the accident."

An accident will be considered preventable when it is determined that the accident could reasonably have been prevented by the driver.

An accident will not be considered "non-preventable" merely because all laws, ordinances, orders, or rules and regulations were obeyed or that the driver had the right-of-way at the time if there are other circumstances involved.

Preventable Accidents

Backing Accidents — Responsibility for backing safely is entirely the driver's. Backing is dangerous only if the driver neglects to make sure the way is clear during the entire movement. Backing should be avoided as much as possible.

Intersection Accidents — Stop lights, stop signs, or right-of-ways are no protection against collision with violators, funeral processions, fire, police, or ambulance vehicles.

Pedestrian Accidents — Whether or not pedestrians have the right-of-way or are jaywalking, pedestrian accidents should not be decided unavoidable unless searching investigation fails to uncover anything that the driver could have done to prevent the accident.

Rear-End Collisions — Such collisions with the rear of the vehicle ahead or when the vehicle to the rear strikes your vehicle when caused by sudden stops at intersections, grade crossings, passenger stops, when preparing to turn or park, or when improperly parked or allowed to roll back before starting is seldom excusable. Most rear end collisions can be avoided by foresight in controlling speed and allowing sufficient following distance. Watch the traffic situation ahead of the vehicle in front of you so that you can anticipate the need to stop. Stop gradually — not suddenly.

Traffic Lane Encroachment Accidents — Such accidents result from passing, weaving, squeeze plays, shutouts, or entering a line of moving traffic. Such accidents are caused by trespassing on the right of others to move in a straight line without interference.

Accidents Resulting from Mechanical Condition — Any accident blamed on mechanical failure that reasonable and prudent attention could have foreseen but was not reported for repair, including

any accident blamed on mechanical failure as the result of a driver operating his vehicle in excess of its mechanical limits or from mechanical failure that resulted from a driver's rough or abusive handling.

Accidents with Fixed Rail Vehicles — Trains and street cars always have the right-of-way because they run on fixed tracks, cannot dodge or maneuver and need greater braking distance than rubber tire vehicles.

Collisions with Stationary Objects, Non-Collision Accidents, Unattended Vehicle Accidents and Miscellaneous Accidents — Accidents involving scraping or striking curbs, buildings, signs, trees, posts bridges, parking vehicles, and overhead obstructions and accidents resulting from overturning, running off the roadway, or colliding with stationary objects sometimes are caused by taking emergency action to avoid another accident. However, investigation usually reveals that the driver was not driving defensively prior to that instant. If he had, he would not have placed himself in a position where emergency action became necessary. Expert drivers don't depend on their skill to get them out of tight spots; they depend on their judgment to avoid tight spots.

Accidents Blamed on Adverse Weather Conditions — Rain, fog, snow, sleet, or icy pavements do not cause accidents but add more hazards to driving and make the normal hazards worse. Accidents blamed on skidding or bad weather conditions are classed as preventable because they can be prevented by reducing speed, installing skid chains, using sand or most important, stopping entirely if the going gets too hazardous to continue safely.

Parking Accidents — Unconventional parking locations, including double parking, failure to put out warning devices, etc., generally constitute evidence for judging an accident preventable. Roll away accidents from parked position normally should be classified as preventable. This includes unauthorized entry into an unlocked and unattended vehicle, failure to properly block wheels or to turn wheels toward the curb to prevent vehicle movement.

The following will constitute prima facie evidence that the accident in question was of a preventable nature:

- A. Violation of a law or ordinance by University driver.
- B. University vehicle strikes another vehicle in rear end.
- C. University vehicle strikes fixed object.
- D. Backing University vehicle strikes vehicle or object.
- E. High speed operation resulting in loss of vehicle control regardless of weather conditions.

- F. Emergency vehicle operation where the driver failed to utilize due care and caution, i.e., intersection accidents involving collision with vehicles whose operators would have ordinarily had the right-of-way.

9.4.8 Non-Preventable Accidents

An accident will be considered non-preventable when it is determined that the accident could not have reasonably been prevented or avoided by the driver of the University vehicle.

The Accident Review Board will have the authority to submit to the Department Heads recommendations of disciplinary action upon a showing of evidence that the individual has been negligent in any of the following:

- A. Has committed an offense for which mandatory revocation of his Idaho state license is required upon conviction.
- B. Has been involved as a driver in accident resulting in the death of or personal injury of another or serious property damage, which accident is obviously the result of the negligence of such driver.
- C. Is a habitually reckless or negligent driver of a University-owned vehicle.
- D. Is incompetent to drive a University-owned vehicle.
- E. Has lost his privilege to operate a motor vehicle under the Idaho point system.
- F. Has made or permitted an unlawful or fraudulent use of his driver's license or has displayed or represented as his own a license not issued to him.
- G. Has been sentenced by a court of record and all or part of the sentence has been suspended and a condition of suspension of the sentence is that the operator or chauffeur does not operate a motor vehicle for a period of time.
- H. In the event a driver has, within a period of 18 months, been found responsible for three or more accidents, his Department Head will be required to advise the Board as to what actions are being taken to eliminate future accidents caused by this driver.

9.4.9 Determining Preventability

Following the presentation and discussion of the facts and circumstances surrounding the accident, the chairperson will call for a vote to determine whether the accident was preventable on the University operator's part.

If a majority vote that the accident was preventable, a recommendation of disciplinary action will be presented in writing to the Department Head.

An Accident Review Board summary will be completed and submitted to the Department Head at the conclusion of the meeting.

The Department Head may accept or reject the recommendations of the Board.

In the event a final determination is made that an accident was preventable, regardless of any other disciplinary action which might be taken, the employee shall be required to attend the next available Defensive Driving Course as set forth in section 9.1.

9.4.10 Civil Service Employees

The Civil Service statutes, rules, and regulations governing fire and police sworn personnel will apply at hearings and in the review of such employees involved in vehicle accidents. A copy of the respective Department Accident Review Board recommendations will be forwarded to the Safety Coordinator for administrative purposes.

10.0 Emergency Management Program — The University's Emergency Management Program is contained in a separate manual, The Emergency Response Manual, adopted November 15, 1994, and is incorporated herein as part of this Safety and Loss Control Plan.