- [ ] Are the brakes on each industrial truck capable of bringing the vehicle to a complete and safe stop when fully loaded?
- [ ] Does the parking brake of the industrial truck prevent the vehicle from moving when unattended?
- [ ] Are industrial trucks that operate where flammable gases, vapors, combustible dust, or ignitable fibers may be present approved for such locations?
- [ ] Are motorized hand and hand/rider trucks designed so that the brakes are applied and power to the drive motor shuts off when the operator releases his or her grip on the device that controls the truck's travel?
- [ ] Are industrial trucks with internal combustion engines that are operated in buildings or enclosed areas carefully checked to ensure that such operations do not cause harmful concentrations of dangerous gases or fumes?
- [ ] Are safe distances maintained from the edges of elevated ramps and platforms?
- [ ] Are employees prohibited from standing or passing under elevated portions of trucks, whether loaded or empty?
- [ ] Are unauthorized employees prohibited from riding on trucks?
- [ ] Are operators prohibited from driving up to anyone standing in front of a fixed object?
- [ ] Are arms and legs kept inside the running lines of the truck?
- [ ] Are loads handled only within the rated capacity of the truck?
- [ ] Are trucks in need of repair removed from service immediately?

SPRAYING OPERATIONS

- [ ] Is adequate ventilation provided before spraying operations are started?
- [ ] Is mechanical ventilation provided when spraying operations are performed in enclosed areas?
- [ ] When mechanical ventilation is provided during spraying operations, is it so arranged that it will not circulate the contaminated air?
- [ ] Is the spray area free of hot surfaces and at least 20 feet (6.096 meters) from flames, sparks, operating electrical motors and other ignition sources?
- [ ] Are portable lamps used to illuminate spray areas suitable for use in a hazardous location?
- [ ] Is approved respiratory equipment provided and used when appropriate during spraying operations?
- [ ] Do solvents used for cleaning have a flash point to 100 degrees Fahrenheit (deg. F) or more?
- [ ] Are fire control sprinkler heads kept clean?
- [ ] Are "NO SMOKING" signs posted in spray areas, paint rooms, paint booths and paint storage areas?
- [ ] Is the spray area kept clean of combustible residue?
- [ ] Are spray booths constructed of metal, masonry, or other substantial noncombustible material?
- [ ] Are spray booth floors and baffles noncombustible and easily cleaned?
- [ ] Is infrared drying apparatus kept out of the spray area during spraying operations and is the spray booth completely ventilated before using the drying apparatus?
- [ ] Is the electric drying apparatus properly grounded?
- [ ] Are lighting fixtures for spray booths located outside the booth with the interior lighted through sealed clear panels?
- [ ] Are the electric motors for exhaust fans placed outside booths or ducts?
- [ ] Are belts and pulleys inside the booth fully enclosed?
- [ ] Do ducts have access doors to allow cleaning?
- [ ] Do all drying spaces have adequate ventilation?

ENTERING CONFINED SPACES

- [ ] Are confined spaces thoroughly emptied of any corrosive or hazardous substances, such as acids or caustics, before entry?

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

ENVIRONMENTAL CONTROLS

- [ ] Are all work areas properly illuminated?
- [ ] Are employees instructed in proper first aid and other emergency procedures?
- [ ] Are hazardous substances, blood and other potentially infectious materials, which may cause harm by inhalation, ingestion, or skin absorption or contact, identified?
- [ ] Are employees aware of the hazards involved with the various chemicals they may be exposed to in their work environment, such as ammonia, chlorine, epoxies, caustics, etc.?
- [ ] Is employee exposure to chemicals in the workplace kept within acceptable levels?
- [ ] Can a less harmful method or product be used?
- [ ] Is the work area ventilation system appropriate for the work performed?
- [ ] Are spray painting operations performed in spray rooms or booths equipped with an appropriate exhaust system?
- [ ] Is employee exposure to welding fumes controlled by ventilation, use of respirators, exposure time limits, or other means?

- [ ] Are welders and other nearby workers provided with flash shields during welding operations?
- [ ] If forklifts and other vehicles are used in buildings or other enclosed areas, are the carbon monoxide levels kept below maximum acceptable concentration?
- [ ] Has there been a determination that noise levels in the facilities are within acceptable levels?
- [ ] Are steps being taken to use engineering controls to reduce excessive noise levels?
- [ ] Are proper precautions being taken when handling asbestos and other fibrous materials?
- [ ] Are caution labels and signs used to warn of hazardous substances (e.g., asbestos) and biohazards (e.g., bloodborne pathogens)?
- [ ] Are wet methods used, when practicable, to prevent the emission of airborne asbestos fibers, silica dust and similar hazardous materials?
- [ ] Are engineering controls examined and maintained or replaced on a scheduled basis?
- [ ] Is vacuuming with appropriate equipment used whenever possible rather than blowing or sweeping dust?
- [ ] Are grinders, saws and other machines that produce respirable dusts vented to an industrial collector or central exhaust system?
- [ ] Are all local exhaust ventilation systems designed to provide sufficient air flow and volume for the application, and are ducts not plugged and belts not slipping?
- [ ] Is PPE provided, used and maintained wherever required?
- [ ] Are there written standard operating procedures for the selection and use of respirators where needed?
- [ ] Are restrooms and washrooms kept clean and sanitary?
- [ ] Is all water provided for drinking, washing and cooking potable?
- [ ] Are all outlets for water that is not suitable for drinking clearly identified?
- [ ] Are employees' physical capacities assessed before they are assigned to jobs requiring heavy work?
- [ ] Are employees instructed in the proper manner for lifting heavy objects?
- [ ] Where heat is a problem, have all fixed work areas been provided with spot cooling or air conditioning?
- [ ] Are employees screened before assignment to areas of high heat to determine if their health might make them more susceptible to having an adverse reaction?
- [ ] Are employees working on streets and roadways who are exposed to the hazards of traffic required to wear bright colored (traffic orange) warning vests?
- [ ] Are exhaust stacks and air intakes located so that nearby contaminated air will not be recirculated within a building or other enclosed area?
- [ ] Is equipment producing ultraviolet radiation properly shielded?
- [ ] Are universal precautions observed where occupational exposure to blood or other potentially infectious materials can occur and in all instances where differentiation of types of body fluids or potentially infectious materials is difficult or impossible?

FLAMMABLE AND COMBUSTIBLE MATERIALS

- [ ] Are combustible scrap, debris and waste materials (oily rags, etc.) stored in covered metal receptacles and promptly removed from the worksite?
- [ ] Is proper storage practiced to minimize the risk of fire, including spontaneous combustion?
- [ ] Are approved containers and tanks used to store and handle flammable and combustible liquids?
- [ ] Are all connections on drums and combustible liquid piping, vapor and liquid tight?
- [ ] Are all flammable liquids kept in closed containers when not in use (e.g., parts cleaning tanks, pans, etc.)?

- [ ] Are bulk drums of flammable liquids grounded and bonded to containers during dispensing?
- [ ] Do storage rooms for flammable and combustible liquids have explosion-proof lights and mechanical or gravity ventilation?
- [ ] Is liquefied petroleum gas stored, handled and used in accordance with safe practices and standards?
- [ ] Are "NO SMOKING" signs posted on liquefied petroleum gas tanks and in areas where flammable or combustible materials are used or stored?
- [ ] Are liquefied petroleum storage tanks guarded to prevent damage from vehicles?
- [ ] Are all solvent wastes and flammable liquids kept in fire-resistant, covered containers until they are removed from the worksite?
- [ ] Is vacuuming used whenever possible rather than blowing or sweeping combustible dust?
- [ ] Are firm separators placed between containers of combustibles or flammables that are stacked one upon another to ensure their support and stability?
- [ ] Are fuel gas cylinders and oxygen cylinders separated by distance and fire-resistant barriers while in storage?
- [ ] Are fire extinguishers selected and provided for the types of materials in the areas where they are to be used?

  Class A - Ordinary combustible material fires.

  Class B - Flammable liquid, gas or grease fires.

  Class C - Energized-electrical equipment fires.

- [ ] Are appropriate fire extinguishers mounted within 75 feet (22.86 meters) of outside areas containing flammable liquids and within 10 feet (3.048 meters) of any inside storage area for such materials?
- [ ] Are extinguishers free from obstructions or blockage?
- [ ] Are all extinguishers serviced, maintained and tagged at intervals not to exceed one year?
- [ ] Are all extinguishers fully charged and in their designated places?
- [ ] Where sprinkler systems are permanently installed, are the nozzle heads so directed or arranged that water will not be sprayed into operating electrical switchboards and equipment?
- [ ] Are safety cans used for dispensing flammable or combustible liquids at the point of use?
- [ ] Are all spills of flammable or combustible liquids cleaned up promptly?
- [ ] Are storage tanks adequately vented to prevent the development of excessive vacuum or pressure as a result of filling, emptying, or atmosphere temperature changes?
- [ ] Are storage tanks equipped with emergency venting that will relieve excessive internal pressure caused by fire exposure?
- [ ] Are rules enforced in areas involving storage and use of hazardous materials?

HAZARDOUS CHEMICAL EXPOSURE

- [ ] Are employees aware of the potential hazards and trained in safe handling practices for situations involving various chemicals stored or used in the workplace such as acids, bases, caustics, epoxies, phenols, etc.?
- [ ] Is employee exposure to chemicals kept within acceptable levels?
- [ ] Are eye-wash fountains and safety showers provided in areas where corrosive chemicals are handled?
- [ ] Are all containers, such as vats, storage tanks, etc., labeled as to their contents, e.g., "CAUSTICS"?
- [ ] Are all employees required to use personal protective clothing and equipment when handling chemicals (gloves, eye protection, respirators, etc.)?
- [ ] Are flammable or toxic chemicals kept in closed containers when not in use?
- [ ] Are chemical piping systems clearly marked as to their content?
- [ ] Where corrosive liquids are frequently handled in open containers or drawn from storage vessels or pipelines, are adequate means readily

available for neutralizing or disposing of spills or overflows and performed properly and safely?

- [ ] Are standard operating procedures established and are they being followed when cleaning up chemical spills?
- [ ] Are respirators stored in a convenient, clean and sanitary location, and are they adequate for emergencies?
- [ ] Are employees prohibited from eating in areas where hazardous chemicals are present?
- [ ] Is PPE used and maintained whenever necessary?
- [ ] Are there written standard operating procedures for the selection and use of respirators where needed?
- [ ] If you have a respirator protection program, are your employees instructed on the correct usage and limitations of the respirators? Are the respirators National Institute for Occupational Safety and Health (NIOSH)-approved for this particular application? Are they regularly inspected, cleaned, sanitized and maintained?
- [ ] If hazardous substances are used in your processes, do you have a medical or biological monitoring system in operation?
- [ ] Are you familiar with the threshold limit values or permissible exposure limits of airborne contaminants and physical agents used in your workplace?
- [ ] Have appropriate control procedures been instituted for hazardous materials, including safe handling practices and the use of respirators and ventilation systems?
- [ ] Whenever possible, are hazardous substances handled in properly designed and exhausted booths or similar locations?
- [ ] Do you use general dilution or local exhaust ventilation systems to control dusts, vapors, gases, fumes, smoke, solvents, or mists that may be generated in your workplace?
- [ ] Is operational ventilation equipment provided for removal of contaminants from production grinding, buffing, spray painting, and/or vapor degreasing?
- [ ] Do employees complain about dizziness, headaches, nausea, irritation, or other factors of discomfort when they use solvents or other chemicals?
- [ ] Is there a dermatitis problem? Do employees complain about dryness, irritation, or sensitization of the skin?
- [ ] Have you considered having an industrial hygienist or environmental health specialist evaluate your operation?
- [ ] If internal combustion engines are used, is carbon monoxide kept within acceptable levels?
- [ ] Is vacuuming used rather than blowing or sweeping dust whenever possible for cleanup?
- [ ] Are materials that give off toxic, asphyxiant, suffocating, or anesthetic fumes stored in remote or isolated locations when not in use?

HAZARDOUS SUBSTANCES COMMUNICATION

- [ ] Is there a list of hazardous substances used in your workplace and an MSDS readily available for each hazardous substance used?
- [ ] Is there a current written exposure control plan for occupational exposure to bloodborne pathogens and other potentially infectious materials, where applicable?
- [ ] Is there a written hazard communication program dealing with MSDSs, labeling and employee training?
- [ ] Is each container for a hazardous substance (i.e., vats, bottles, storage tanks, etc.) labeled with product identity and a hazard warning (communication of the specific health hazards and physical hazards)?
- [ ] Is there an employee training program for hazardous substances that includes:
  - an explanation of what an MSDS is and how to use and obtain one;
  - MSDS contents for each hazardous substance or class of substances;
  - explanation of "A Right to Know";
  - identification of where an employee can see

the written hazard communication program;

- location of physical and health hazards in particular work areas and the specific protective measures to be used; and
- details of the hazard communication program, including how to use the labeling system and MSDSs.

☐ Does the employee training program on the bloodborne pathogens standard contain the following elements:

- an accessible copy of the standard and an explanation of its contents;
- a general explanation of the epidemiology and symptoms of bloodborne diseases;
- an explanation of the modes of transmission of Bloodborne Pathogens;
- an explanation of the employer's exposure control plan and the means by which employees can obtain a copy of the written plan;
- an explanation of the appropriate methods for recognizing tasks and the other activities that may involve exposure to blood and other potentially infectious materials;
- an explanation of the use and limitations of methods that will prevent or reduce exposure, including appropriate engineering controls, work practices and PPE;
- information on the types, proper use, location, removal, handling, decontamination and disposal of PPE;
- an explanation of the basis for selection of PPE;
- information on the hepatitis B vaccine;
- information on the appropriate actions to take and persons to contact in an emergency involving blood or other potentially infectious materials;
- an explanation of the procedure to follow if an exposure incident occurs, including the methods of reporting the incident and the medical follow-up that will be made available;
- information on post-exposure evaluations and follow-up; and
- an explanation of signs, labels and color coding.

☐ Are employees trained in:

- how to recognize tasks that might result in occupational exposure;
- how to use work practice, engineering controls and PPE, and their limitations;
- how to obtain information on the types, selection, proper use, location, removal, handling, decontamination and disposal of PPE; and
- who to contact and what to do in an emergency.

ELECTRICAL

☐ Do you require compliance with OSHA standards for all contract electrical work?

☐ Are all employees required to report any obvious hazard to life or property in connection with electrical equipment or lines as soon as possible?

☐ Are employees instructed to make preliminary inspections and/or appropriate tests to determine conditions before starting work on electrical equipment or lines?

☐ When electrical equipment or lines are to be serviced, maintained, or adjusted, are necessary switches opened, locked out or tagged, whenever possible?

☐ Are portable electrical tools and equipment grounded or of the double insulated type?

☐ Are electrical appliances such as vacuum cleaners, polishers, vending machines, etc., grounded?

☐ Do extension cords have a grounding conductor?

☐ Are multiple plug adaptors prohibited?

☐ Are ground-fault circuit interrupters installed on each temporary 15 or 20 ampere, 120 volt alternating current (AC) circuit at locations where construction, demolition, modifications,

alterations, or excavations are being performed?

- [ ] Are all temporary circuits protected by suitable disconnecting switches or plug connectors at the junction with permanent wiring?
- [ ] Do you have electrical installations in hazardous dust or vapor areas? If so, do they meet the National Electrical Code (NEC) for hazardous locations?
- [ ] Are exposed wiring and cords with frayed or deteriorated insulation repaired or replaced promptly?
- [ ] Are flexible cords and cables free of splices or taps?
- [ ] Are clamps or other securing means provided on flexible cords or cables at plugs, receptacles, tools, equipment, etc., and is the cord jacket securely held in place?
- [ ] Are all cord, cable and raceway connections intact and secure?
- [ ] In wet or damp locations, are electrical tools and equipment appropriate for the use or location or otherwise protected?
- [ ] Is the location of electrical power lines and cables (overhead, underground, under floor, other side of walls, etc.) determined before digging, drilling, or similar work is begun?
- [ ] Are metal measuring tapes, ropes, hand-lines or similar devices with metallic thread woven into the fabric prohibited where they could come in contact with energized parts of equipment or circuit conductors?
- [ ] Is the use of metal ladders prohibited where the ladder or the person using the ladder could come in contact with energized parts of equipment, fixtures, or circuit conductors?
- [ ] Are all disconnecting switches and circuit breakers labeled to indicate their use or equipment served?
- [ ] Are disconnecting means always opened before fuses are replaced?
- [ ] Do all interior wiring systems include provisions for grounding metal parts of electrical raceways, equipment and enclosures?
- [ ] Are all electrical raceways and enclosures securely fastened in place?
- [ ] Are all energized parts of electrical circuits and equipment guarded against accidental contact by approved cabinets or enclosures?
- [ ] Is sufficient access and working space provided and maintained around all electrical equipment to permit ready and safe operations and maintenance?
- [ ] Are all unused openings (including conduit knockouts) in electrical enclosures and fittings closed with appropriate covers, plugs, or plates?
- [ ] Are electrical enclosures such as switches, receptacles, junction boxes, etc., provided with tight-fitting covers or plates?
- [ ] Are disconnecting switches for electrical motors in excess of two horsepower able to open the circuit when the motor is stalled without exploding? (Switches must be horsepower rated equal to or in excess of the motor rating.)
- [ ] Is low voltage protection provided in the control device of motors driving machines or equipment that could cause injury from inadvertent starting?
- [ ] Is each motor disconnecting switch or circuit breaker located within sight of the motor control device?
- [ ] Is each motor located within sight of its controller or is the controller disconnecting means able to be locked open or is a separate disconnecting means installed in the circuit within sight of the motor?
- [ ] Is the controller for each motor that exceeds two horsepower rated equal to or above the rating of the motor it serves?
- [ ] Are employees who regularly work on or around energized electrical equipment or lines instructed in cardiopulmonary resuscitation (CPR)?
- [ ] Are employees prohibited from working alone on energized lines or equipment over 600 volts?

NOISE

- ☐ Are there areas in the workplace where continuous noise levels exceed 85 decibels?
- ☐ Is there an ongoing preventive health program to educate employees in safe levels of noise, exposures, effects of noise on their health and the use of personal protection?
- ☐ Have work areas where noise levels make voice communication between employees difficult been identified and posted?
- ☐ Are noise levels measured with a sound level meter or an octave band analyzer and are records being kept?
- ☐ Have engineering controls been used to reduce excessive noise levels? Where engineering controls are determined to be infeasible, are administrative controls (i.e., worker rotation) being used to minimize individual employee exposure to noise?
- ☐ Is approved hearing protective equipment (noise attenuating devices) available to every employee working in noisy areas?
- ☐ Have you tried isolating noisy machinery from the rest of your operation?
- ☐ If you use ear protectors, are employees properly fitted and instructed in their use?
- ☐ Are employees in high noise areas given periodic audiometric testing to ensure that you have an effective hearing protection system?

FUELING

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

IDENTIFICATION OF PIPING SYSTEMS

- ☐ When nonpotable water is piped through a facility, are outlets or taps posted to alert employees that the water is unsafe and not to be used for drinking, washing, or other personal use?
- ☐ When hazardous substances are transported through above-ground piping, is each pipeline identified at points where confusion could introduce hazards to employees?
- ☐ When pipelines are identified by color painted bands or tapes, are the bands or tapes located at reasonable intervals and at each outlet, valve, or connection, and are all visible parts of the line so identified?
- ☐ When pipelines are identified by color, is the color code posted at all locations where confusion could introduce hazards to employees?
- ☐ When the contents of pipelines are identified by name or name abbreviation, is the information readily visible on the pipe near each valve or outlet?
- ☐ When pipelines carrying hazardous substances are identified by tags, are the tags constructed of durable materials, the message printed

clearly and permanently, and are tags installed at each valve or outlet?

- [ ] When pipelines are heated by electricity, steam, or other external source, are suitable warning signs or tags placed at unions, valves, or other serviceable parts of the system?

MATERIALS HANDLING

- [ ] Is there safe clearance for equipment through aisles and doorways?
- [ ] Are aisleways permanently marked and kept clear to allow unhindered passage?
- [ ] Are motorized vehicles and mechanized equipment inspected daily or prior to use?
- [ ] Are vehicles shut off and brakes set prior to loading or unloading?
- [ ] Are containers of liquid combustibles or flammables, when stacked while being moved, always protected by dunnage (packing material) sufficient to provide stability?
- [ ] Are dock boards (bridge plates) used when loading or unloading operations are taking place between vehicles and docks?
- [ ] Are trucks and trailers secured from movement during loading and unloading operations?
- [ ] Are dock plates and loading ramps constructed and maintained with sufficient strength to support imposed loading?
- [ ] Are hand trucks maintained in safe operating condition?
- [ ] Are chutes equipped with sideboards of sufficient height to prevent the materials being handled from falling off?
- [ ] Are chutes and gravity roller sections firmly placed or secured to prevent displacement?
- [ ] Are provisions made to brake the movement of the handled materials at the delivery end of rollers or chutes?
- [ ] Are pallets usually inspected before being loaded or moved?
- [ ] Are safety latches and other devices being used to prevent slippage of materials off of hoisting hooks?
- [ ] Are securing chains, ropes, chockers, or slings adequate for the job?
- [ ] Are provisions made to ensure that no one is below when hoisting material or equipment?
- [ ] Are MSDSs available to employees handling hazardous substances?

TRANSPORTING EMPLOYEES AND MATERIALS

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

CONTROL OF HARMFUL SUBSTANCES BY VENTILATION

- [ ] Is the volume and velocity of air in each exhaust system sufficient to gather the dusts, fumes, mists, vapors, or gases to be controlled, and to convey them to a suitable point of disposal?

- [ ] Are exhaust inlets, ducts and plenums designed, constructed and supported to prevent collapse or failure of any part of the system?
- [ ] Are clean-out ports or doors provided at intervals not to exceed 12 feet (3.6576 meters) in all horizontal runs of exhaust ducts?
- [ ] Where two or more different operations are being controlled through the same exhaust system, could the combination of substances involved create a fire, explosion, or chemical reaction hazard in the duct?
- [ ] Is adequate makeup air provided to areas where exhaust systems are operating?
- [ ] Is the source point for makeup air located so that only clean, fresh air, free of contaminants will enter the work environment?
- [ ] Where two or more ventilation systems serve a work area, is their operation such that one will not offset the functions of the other?

SANITIZING EQUIPMENT AND CLOTHING

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

TIRE INFLATION

- [ ] Where tires are mounted and/or inflated on drop center wheels or on wheels with split rims and/or retainer rings, is a safe practice procedure posted and enforced?
- [ ] Does each tire inflation hose have a clip-on chuck with at least 2.54 inches (6.45 centimeters) of hose between the chuck and an in-line hand valve and gauge?
- [ ] Does the tire inflation control valve automatically shut off the air flow when the valve is released?
- [ ] Is a tire restraining device such as a cage, rack, or other effective means used while inflating tires mounted on split rims or rims using retainer rings?
- [ ] Are employees prohibited from standing directly over or in front of a tire while it is being inflated?

OSHA Assistance

OSHA'S OFFICE OF SMALL BUSINESS ASSISTANCE

OSHA created the Office of Small Business Assistance to help small business employers understand their safety and health obligations, access compliance information, provide guidance in regulatory standards, and to educate them about cost-effective means for ensuring the safety and health of worksites.

OSHA's Office of Small Business Assistance can be contacted by telephone at (202) 693-2220 or by writing to the U.S. Department of Labor, 200 Constitution Avenue, NW, Room N-3700, Washington, DC 20210.

ON-SITE CONSULTATION

Using the free and confidential on-site consultation service largely funded by the Federal OSHA, employers can find out about potential hazards at their worksites, improve their occupational safety and health management systems, and even qualify for a one-year exemption from routine OSHA inspections.

The service is delivered at your workplace by state governments using well-trained professional staff. Most consultations take place on-site, though limited services away from the worksite are available.

Primarily targeted for smaller businesses, this safety and health Consultation Program is completely separate from OSHA's enforcement efforts. It is also confidential. No inspections are triggered by using the Consultation Program and no citations are issued or penalties proposed.

Your name, your firm's name and any information you provide about your workplace, plus any unsafe or unhealthful working conditions that the consultant uncovers, will not routinely be reported to the OSHA enforcement staff.

Your only obligation will be to commit to correcting serious job safety and health hazards discovered -- a commitment that you are expected to make prior to the actual consultation visit. If hazards are discovered, the consultant will work with you to ensure they are corrected in a reasonable timeframe agreed upon by all parties.

Getting Started. Since consultation is a voluntary activity, you must request it. Your telephone call or letter sets the consulting machinery in motion. The consultant will discuss your specific needs and set up a visit date based on the priority assigned to your request, your work schedule and the time needed for the consultant to prepare adequately to serve you. OSHA encourages a complete review of your firm's safety and health situation; however, if you wish, you may limit the visit to one or more specific problems.

Opening Conference. When the consultant arrives at your worksite for the scheduled visit, he or she will first meet with you in an opening conference to briefly review the consultant's role and the obligations you incur as an employer.

Walk-through. Together, you and the consultant will examine conditions in your workplace. OSHA strongly encourages maximum employee participation in the walk-through. Better informed and alert employees can help you identify and correct potential injury and illness hazards in your workplace. Talking with employees during the walk-through helps the consultant identify and judge the nature and extent of specific hazards.

The consultant will study your entire workplace, or only those specific operations you designate, and discuss applicable OSHA standards. The consultant also will point out other safety or health risks which might not be cited under OSHA standards, but which nevertheless may pose safety or health risks to your employees. He or she may suggest and even provide measures such as self-inspection and safety and health training that you and your employees can apply to prevent future hazardous situations.

A comprehensive consultation also includes: (1) appraisal of all mechanical and environmental hazards and physical work practices; (2) appraisal of the present job safety and health program or help in establishing one; (3) a conference with management on findings; (4) a written report of recommendations and agreements; and (5) training and assistance with implementing recommendations.

Closing Conference. The consultant will then review detailed findings with you in a closing conference. You will learn not only what you need to improve but what you are doing right, as well. At that time you can discuss problems, possible solutions and abatement periods to eliminate or control any serious hazards identified during the walk-through.

In rare instances, the consultant may find an "imminent danger" situation during the walk-through. In that case, you must take immediate action to protect employees. In certain other situa-

tions–those that would be judged a "serious violation" under OSHA criteria–you and the consultant must develop and agree to a reasonable plan and schedule to eliminate or control that hazard. The consultant will offer general approaches and options to you. He or she may also suggest other sources for technical help.

Abatement and Follow-through. Following the closing conference, the consultant will send you a detailed written report explaining the findings and confirming any abatement periods agreed upon. The consultant may also contact you from time to time to check your progress. You, of course, may always contact him or her for assistance.

Ultimately, OSHA does require hazard abatement so that each consultation visit achieves its objective–effective employee protection. If you fail to eliminate or control identified serious hazards (or an imminent danger) according to the plan and within the limits agreed upon or an agreed-upon extension, the situation must be referred from consultation to an OSHA enforcement office for appropriate action. This type of referral is *extremely* rare.

Benefits. Knowledge of your workplace hazards and ways to eliminate them can only improve your own operations–and the management of your firm. You will get professional advice and assistance on the correction of workplace hazards and benefit from on-site training and assistance provided. The consultant can help you establish or strengthen an employee safety and health program, making safety and health activities routine rather than crisis-oriented responses.

In many states, employers may participate in OSHA's Safety and Health Achievement Recognition Program (SHARP). This program is designed to provide incentives and support to smaller, high-hazard employers to develop, implement and continuously improve effective safety and health programs at their worksite(s). SHARP provides recognition of employers who have demonstrated exemplary achievements in workplace safety and health, beginning with a comprehensive safety and health consultation visit, correction of all workplace safety and health hazards, adoption and implementation of effective safety and health management systems, and agreement to request further consultative visits if major changes in working conditions or processes occur that may introduce new hazards. Employers who meet these specific SHARP requirements may be removed from OSHA's programmed inspection list for one year.

The on-site consultants **will:**

- help you recognize hazards in your workplace,
- suggest general approaches or options for solving a safety or health problem,
- identify kinds of help available if you need further assistance,
- provide you with a written report summarizing findings,
- assist you in developing or maintaining an effective safety and health program,
- provide training and education for you and your employees,
- recommend you for a one-year exclusion from OSHA programmed inspections, once program criteria are met.

The on-site consultants **will not:**

- issue citations or propose penalties for violations of OSHA standards,
- report possible violations to OSHA enforcement staff,
- guarantee that your workplace will "pass" an OSHA inspection.

For a list of consultation projects in each state, see the OSHA website at www.osha.gov/dcsp/smallbusiness/consult_directory.html.

OTHER COOPERATIVE PROGRAMS

Information about OSHA's different cooperative programs is available from any OSHA Regional Office, OSHA Area Office, or by contacting OSHA's Directorate of Cooperative and State Programs at the U.S. Department of Labor, Occupational Safety and Health Administration, 200 Constitution Avenue, NW, Room N-3700, Washington, DC 20210, phone (202) 693-2200.

VOLUNTARY PROTECTION PROGRAMS (VPP)

OSHA's VPP provide an opportunity for labor, management and government to work together cooperatively to further the goal of providing effective safety and health protection in the workplace. The VPP grant recognition to worksites that provide or are committed to providing effective protection for their employees through implementation of systematically managed safety and health programs. The Star Program is for worksites that have at least one year's experience with an effectively implemented safety and health program. The Merit Program is for worksites working toward an effectively implemented program. The Star Demonstration Program is for worksites with programs at Star quality but with some aspect of their program that requires further study by OSHA. All participants work in partnership with OSHA and provide models for OSHA and for their industries.

OSHA STRATEGIC PARTNERSHIP PROGRAM (OSPP)

OSPP is designed to enable groups of employers, employees and employee representatives to partner with OSHA and enter into an extended, voluntary, cooperative relationship in order to encourage, assist and recognize efforts to eliminate serious hazards and achieve a high level of worker safety and health.

OSHA ALLIANCE PROGRAM

Alliances are goal-oriented written agreements between OSHA and organizations to work together to prevent workplace injuries and illnesses. Organizations include employers, employees, labor unions, trade or professional groups, educational institutions and government agencies. Alliances focus on one or more of the following goals: training and education, outreach and communications, and promoting the national dialogue on occupational safety and health.

States with Approved Plans

The *Occupational Safety and Health Act of 1970* encourages states to develop and operate their own job safety and health programs. OSHA approves and monitors state plans and provides up to 50 percent of an approved plan's operating costs.

Twenty-four states, Puerto Rico and the Virgin Islands currently operate approved state plans. These state plans operate under authority of state law and are required to be, in structure and performance, "at least as effective as" the Federal OSHA Program. Although many states have adopted standards and procedures identical to Federal standards, states may have different or additional requirements parallel to those described in the Federal program.

To determine which set of standards and regulations apply to you, you need to know whether you are covered by a state plan or subject to Federal OSHA. Please visit http://www.oshaslc.gov/fso/osp/index.html, call the OSHA Area Office nearest you, or (800) 321-OSHA to obtain this information.

If you are subject to state enforcement, the OSHA Area Office will refer you to your state office which can provide all relevant information, such as whether the state is using the Federal standards, information on the poster and recordkeeping requirements, and special services available to small businesses. The state office also can provide you with further assistance, including directing you to the free, on-site consultation services described above.

See the list of OSHA-approved state plans at www.osha.gov.

OSHA Publications

A single free copy of the following materials can be obtained from the OSHA Area or Regional Office, or contact the OSHA Publications Office, U.S. Department of Labor, 200 Constitution Avenue, NW, N-3101, Washington, DC 20210, or call (202) 693-1888, or fax (202) 693-2498.

Access to Medical and Exposure Records – OSHA 3110

All About OSHA – OSHA 3302

Asbestos Standard for the Construction Industry – OSHA 3096

Control of Hazardous Energy (Lockout/Tagout) – OSHA 3120

Employee Workplace Rights – OSHA 3021

Employer Rights and Responsibilities Following an OSHA Inspection – OSHA 3000 (Spanish version 3195)

Hand and Power Tools – OSHA 3080

How to Plan for Workplace Emergencies and Evacuations – OSHA 3088

Job Safety and Health Protection Poster – OSHA 3165

Job Hazard Analysis – OSHA 3071

Model Plans & Programs for the OSHA Bloodborne Pathogens and Hazard Communications Standards – OSHA 3186

Occupational Safety and Health* (OSH) *Act – OSHA 2001

Personal Protective Equipment – OSHA 3151

Servicing Single-Piece and Multi-Piece Rim Wheels – OSHA 3086

The following publications are available from the U.S. Government Printing Office (GPO), Superintendent of Documents, Washington, DC 20402, phone toll-free (866) 512-1800, fax (202) 512-2250. Include GPO Order Number and make checks payable to Superintendent of Documents. All prices are subject to change by GPO.

Hazard Communication: A Compliance Kit – OSHA 3111
Order No. 029-016-00200-6. Cost: $21.00

Construction Industry Digest – OSHA 2202
Order No. 029-016-00212-0. Cost: $8.00

Materials Handling and Storing – OSHA 2236
Order No. 029-016-00215-4. Cost: $3.75

Internet—There is an enormous amount of compliance assistance information on OSHA's website that can be useful to the small business owner, found at http://www.osha.gov/dcsp/compliance_assistance/index.html. OSHA standards, interpretations, directives and additional information are also available at http://www.osha.gov/ and http://www.osha-slc.gov/.

CD-ROM—A wide variety of OSHA materials, including standards, interpretations, directives, and more, can be purchased on CD-ROM from the U.S. Government Printing Office, Superintendent of Documents, phone toll-free (866) 512-1800.

Emergencies—For life-threatening situations, call (800) 321-OSHA. Your call will be directed to the nearest OSHA Area or state office for help.

For further information on any OSHA program, contact your nearest OSHA Area or Regional Office or call (800) 321-OSHA.

Other Sources of Assistance

VOLUNTARY PROTECTION PROGRAMS PARTICIPANTS' ASSOCIATION (VPPPA)

The VPPPA is a private organization made up of VPP participant companies. The VPPPA has members in most states where the Federal OSHA program operates and in many states where state plans are in force. The VPPPA is willing to provide information, outreach, and mentoring to help worksites improve their safety and health programs. Chapters of the national association have been formed in most OSHA regions. Members of these chapters also are willing to provide the kind of assistance provided by the national organization. To contact your regional chapter of the VPPPA, call or write the OSHA Regional Office listed in the back of this publication for the address and telephone number of the chapter in your region. To contact the VPPPA national organization, please call (703) 761-1146 or write to the following address:

Voluntary Protection Programs Participants' Association
7600 East Leesburg Pike, Suite 440
Falls Church, VA 22043
(703) 761-1146

SMALL BUSINESS DEVELOPMENT CENTERS

The U.S. Small Business Administration (SBA) administers the Small Business Development Center Program to provide management and technical assistance to current and prospective small business owners. There is a Small Business Development Center (SBDC) in every state, the District of Columbia, Puerto Rico, Guam, Samoa, and the U.S. Virgin Islands, with more than 1,000 service centers across the country. SBDC assistance is tailored to the local community and the needs of individual clients and designed to deliver up-to-date counseling, training, and technical assistance. Services could include helping small businesses with financial, marketing, production, organization, engineering, and technical problems.

NATIONAL INSTITUTE FOR OCCUPATIONAL SAFETY AND HEALTH (NIOSH)

NIOSH is a research agency in the U.S. Department of Health and Human Services. (OSHA is a regulatory agency in the U.S. Department of Labor). NIOSH conducts research and makes recommendations to prevent work-related illness and injury. NIOSH has produced a useful guide, *Safety and Health Resource Guide for Small Businesses,* with telephone numbers, e-mail and Internet addresses, and mailing information to enable small businesses to contact government agencies, private organizations, consultants, and others who can help with occupational safety and health issues. The NIOSH toll-free phone number is (800) 356-4674, and its website address is www.cdc.gov/niosh.

WORKERS' COMPENSATION CARRIERS AND OTHER INSURANCE COMPANIES

Many workers' compensation carriers, as well as many liability and fire insurance companies, conduct periodic inspections and visits to evaluate safety and health hazards. Managers of small and medium-sized businesses need to know what services are available from these sources. Contact your carrier and see what it has to offer.

TRADE ASSOCIATIONS AND EMPLOYER GROUPS

Because of the increase in job safety and health awareness resulting from OSHA activities, many trade associations and employer groups have put a new emphasis on safety and health matters to better serve their members. If you are a member of such a group, find out how it is assisting its members. If you are not a member, find out if these groups are circulating their materials to nonmembers, as many do.

TRADE UNIONS AND EMPLOYEE GROUPS

If your employees are organized, set up some communications, as you do in normal labor relations, to get coordinated action on hazards in your business. Safety and health is one area where advance planning will produce action on common goals. Many trade unions have safety and health expertise that they are willing to share.

THE NATIONAL SAFETY COUNCIL AND LOCAL CHAPTERS

The National Safety Council (NSC) has a broad range of information services available. If you have a local chapter of the NSC in your area, you can call or visit to see how you can use materials pertaining to your business. If there is no chapter nearby, you can write to:

National Safety Council
1121 Spring Lake Drive
Itasca, IL 60143-3201

PROFESSIONAL ASSOCIATIONS

The following professional associations are an additional resource that may be able to provide assistance to you:

American Society of Safety Engineers
1800 East Oakton Street
Des Plaines, IL 60018-2187

American Industrial Hygiene Association
2700 Prosperity Avenue
Suite 250
Fairfax, VA 22031-4319

American Conference of Governmental
Industrial Hygienists
1330 Kemper Meadow Drive
Cincinnati, OH 45240

SPECIFIC MEDICAL CONSULTATION

Talk to your local doctors or clinics for advice on workplace medical matters on a consulting basis. Contact your local Red Cross chapter for assistance in first-aid training. If you cannot identify a local chapter, call (800) 667-2968 or write to:

American National Red Cross
National Headquarters
Safety Programs
2025 E Street, NW
Washington, DC 20006

YOUR LOCAL LIBRARY

Many local or university libraries contain information on specific safety and health subjects per-

taining to your business. These materials are usually in reference rooms or technical subject areas. Ask your librarian what is available. The library may be able to obtain materials for you through inter-library loan, purchase, etc.

Two basic publications of the National Safety Council will give you many sources of technical information. The *Accident Prevention Manual for Industrial Operations* is a basic reference book for all safety and health work. The second book, *Fundamentals of Industrial Hygiene*, contains excellent information on toxic materials and recommended health and hygiene practices. Both of these references list other sources at the end of each chapter that may help you in solving specific problems.

FINANCING WORKPLACE IMPROVEMENT

The SBA is authorized to make loans to assist small businesses with meeting OSHA standards. Because SBA's definition of a "small" business varies from industry to industry, contact your local SBA field office to determine whether you qualify.

A helpful hint: if you decide to apply for an SBA loan, experience indicates that most delays in processing SBA/OSHA loans are because applications (1) do not adequately describe each workplace condition to be corrected and identify one or more OSHA standards applicable to the condition to be corrected, or (2) do not provide a reasonable estimate of the cost to correct each condition.

In most cases, safety hazards can be corrected without financial assistance. Health hazards may be more costly to correct. The age and condition of the building and equipment are major factors to be considered.

Interest rate information on SBA loans may be obtained from any SBA office. They fluctuate but are generally lower than you can obtain elsewhere. You may wish to consult your own bank. It pays to shop around for loans.

Don't forget to check with your accountant at income tax time, since safety and health improvements can often be expensed or depreciated.

ADDITIONAL WEB PAGES OF INTEREST TO SMALL BUSINESSES

(Internet websites change frequently; these listings may not be current.)

http://www.firstgov.gov
A website for all agencies of the Federal government.

http://www.sba.gov
The U.S. Small Business Administration's home page.

http://www.businesslaw.gov
Legal and regulatory information for small businesses by state.

http://www.regulations.gov
A site to enable small business owners to find all Federal regulations that are open for comment, to read them and to submit their views.

http://www.assistancecenters.net/
For help with understanding environmental regulations that relate to the operation of your business.

http://www.irs.gov/businesses/small/index.html
This Internal Revenue Service website offers industry- and profession-specific tax information and guidelines.

Appendix A: Overall Action Plan Worksheet

Major Action Steps to be Taken	Priority (Assign each Step a Number)	Projected Completion Date	Actual Completion Date
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			

Action Steps

Description of Action to be Taken:

Specific Steps Required	Persons Assigned	Projected Completion Date	Problems/ Delays Encountered	Actual Completion Date
1.				
2.				
3.				
4.				
5.				

Appendix B: **Model Policy Statements**

The following statements provide examples that can be used or modified by employers to help prevent employee injury and illness.

"The Occupational Safety and Health Act of 1970 clearly states our common goal of safe and healthful working conditions. The safety and health of our employees continues to be the first consideration in the operation of this business."

"Safety and health in our business must be a part of every operation. Without question it is every employee's responsibility at all levels."

"It is the intent of this company to comply with all laws. To do this we must constantly be aware of conditions in all work areas that can produce injuries. No employee is required to work at a job he or she knows is not safe or healthful. Your cooperation in detecting hazards and, in turn, controlling them is a condition of your employment. Inform your supervisor immediately of any situation beyond your ability or authority to correct."

"The personal safety and health of each employee of this company is of primary importance. The prevention of occupationally-induced injuries and illnesses is of such consequence that it will be given precedence over operating productivity whenever necessary. To the greatest degree possible, management will provide all mechanical and physical facilities required for personal safety and health in keeping with the highest standards."

"We will maintain a safety and health program conforming to the best practices of organizations of this type. To be successful, such a program must embody the proper attitudes toward injury and illness prevention on the part of supervisors and employees. It also requires cooperation in all safety and health matters, not only between supervisor and employee, but also between each employee and his or her co-workers. Only through such a cooperative effort can a safety program in the best interest of all be established and preserved."

"Our objective is a safety and health program that will reduce the number of injuries and illnesses to an absolute minimum, not merely in keeping with, but surpassing, the best experience of operations similar to ours. Our goal is zero accidents and injuries."

"Our safety and health program will include:

- Providing mechanical and physical safeguards to the maximum extent possible.
- A program of safety and health inspections to identify and eliminate unsafe working conditions or practices, to control health hazards, and to comply fully with the safety and health standards for every job.
- Training all employees in good safety and health practices.
- Providing necessary personal protective equipment and instructions for its use and care.
- Developing and enforcing safety and health rules and requiring that employees cooperate with these rules as a condition of employment.
- Investigating, promptly and thoroughly, every accident to find out what caused it and to correct the problem so that it won't happen again.
- Setting up a system of recognition and awards for outstanding safety service or performance."

"We recognize that the responsibilities for safety and health are shared:

- The employer accepts responsibility for leadership of the safety and health program, for its effectiveness and improvement, and for providing safe conditions.
- Supervisors are responsible for developing the proper attitudes toward safety and health in themselves and in those they supervise, and for ensuring that all operations are performed with the utmost regard for the safety and health of all personnel involved, including themselves.
- Employees are responsible for compliance with all rules and regulations and for continuously practicing safety while performing their duties."

Appendix C: **Codes of Safe Practices**

This is a suggested code. It is general in nature and includes many types of small business activities. It is intended only as a model that you can customize to describe your own work environment.

General Policy

1. All employees of this firm shall follow these safe practice rules, render every possible aid to safe operations, and report all unsafe conditions or practices to the supervisor/employer.

2. Supervisors shall insist that employees observe and obey every rule, regulation, and order necessary to the safe conduct of the work and take such action necessary to obtain compliance.

3. All employees shall be given frequent accident prevention instructions. Instructions, practice drills, and articles concerning workplace safety and health shall be given at least once every _____ working days.

4. Anyone known to be under the influence of alcohol and/or drugs shall not be allowed on the job while in that condition. Persons with symptoms of alcohol and/or drug abuse are encouraged to discuss personal or work-related problems with the supervisor/employer.

5. No one shall knowingly be permitted or required to work while his or her ability or alertness is impaired by fatigue, illness, or other causes that might expose the individual or others to injury.

6. Employees should be alert to see that all guards and other protective devices are in proper places and adjusted, and they shall report deficiencies. Approved protective equipment shall be worn in specified work areas.

7. Horseplay, scuffling, and other acts that tend to endanger the safety or well-being of employees are prohibited.

8. Work shall be well planned and supervised to prevent injuries when working with equipment and handling heavy materials. When lifting heavy objects, employees should bend their knees and use the large muscles of the legs instead of the smaller muscles of the back. Back injuries are the most frequent and often the most persistent and painful type of workplace injury.

9. Workers shall not handle or tamper with any electrical equipment, machinery, or air or water lines in a manner not within the scope of their duties, unless they have received instructions from their supervisor/employer.

10. All injuries shall be reported promptly to the supervisor/employer so that arrangements can be made for medical and/or first-aid treatment. First-aid materials are located in _____; emergency, fire, ambulance, rescue squad, and doctors' telephone numbers are located _____; and fire extinguishers are located at _____.

Suggested Safety Rules

- Do not throw material, tools, or other objects from heights (whether structures or buildings) until proper precautions are taken to protect others from the falling object hazard.
- Wash thoroughly after handling injurious or poisonous substances.
- Gasoline shall not be used for cleaning purposes.
- When using a ladder, always face the steps and use both hands while climbing.

Use of Tools and Equipment

- Keep faces of hammers in good condition to avoid flying nails and bruised fingers.
- Files shall be equipped with handles; never use a file as a punch or pry.
- Do not use a screwdriver as a chisel.
- Do not lift or lower portable electric tools by the power cords; use a rope.
- Do not leave the cords of tools where cars or trucks will run over them.

Machinery and Vehicles

- Do not attempt to operate machinery or equipment without special permission unless it is part of your regular duties.
- Loose or frayed clothing, dangling ties, finger rings, etc., must not be worn around moving machinery or other places where they can get caught.
- Machinery shall not be repaired or adjusted while in operation.

Appendix D: OSHA Job Safety and Health Standards, Regulations and Requirements

OSHA has four separate sets of standards: General Industry (29 Code of Federal Regulations [CFR] 1910), Construction (29 CFR 1926), Maritime Employment (29 CFR 1915-1919), and Agriculture (29 CFR 1928). OSHA has regulations on posting and other administrative matters in 29 CFR 1903 and on recording and reporting of injuries and illnesses in 29 CFR 1904.

The OSH Act also has a general duty clause, section 5(a)(1), 29 U.S.C. 654(b)(1), which provides that:

(a) Each employer – –

(1) shall furnish to each of his employees employment and a place of employment which are free from recognized hazards that are causing or are likely to cause death or serious physical harm to his employees.

A recognized hazard is a danger recognized by the employer's industry or industry in general, by the employer, or by common sense. The general duty clause does not apply if there is an OSHA standard dealing with the hazard, unless the employer knows that the standard does not adequately address the hazard.

General Industry, Maritime, and Construction OSHA standards are available at www.osha.gov.

After you have obtained a copy of the current standards, identify those that apply to your business by a process of elimination. Read the introduction to the subpart heading, and then analyze the possible hazards in terms of **your** workplace, **your** equipment, **your** materials and of **your** employees. For example, if you are engaged in retail trade or service and you do not have compressed gases, flammables, or explosives on your premises, you can eliminate Hazardous Materials (Subpart H) as not applying to your business.

If you have any questions in determining whether a standard is applicable to your workplace, you may contact the nearest OSHA Area Office for assistance. Staff there should be able to answer any questions you may have about standards and provide general guidelines on methods of implementation in your workplace. Small businesses are encouraged to participate in the development of standards.

Appendix E: **Small Business Regulatory Enforcement Fairness Act of 1996 (SBREFA)**

In 1996, Congress passed the Small Business Regulatory Enforcement Fairness Act, or SBREFA, in response to concerns expressed by the small business community that Federal regulations were too numerous, too complex and too expensive to implement. SBREFA was designed to give small businesses assistance in understanding and complying with regulations and more of a voice in the development of new regulations. Under SBREFA, the Occupational Safety and Health Administration (OSHA) and other Federal agencies must:

- Produce Small Entity Compliance Guides for some rules;
- Be responsive to small business inquiries about compliance with the agency's regulations;
- Submit final rules to Congress for review;
- Have a penalty reduction policy for small businesses; and
- Involve small businesses in the development of some proposed rules through Small Business Advocacy Review Panels.

Commenting on Enforcement Actions

Under a law passed by Congress in 1996, the Small Business Administration (SBA) has established an SBA Ombudsman and SBA Regional Fairness Boards to investigate small business complaints about Federal agency enforcement actions.
If you are a small business and believe that you have been treated unfairly by OSHA, you may file an electronic comment/complaint with the SBA Ombudsman over the Internet at:
http://www.sba.gov/ombudsman/comments/commentform1.html
Or you may contact the SBA's Office of the National Ombudsman by:

- Toll-Free Phone: (888) REG-FAIR (734-3247)
- Fax: (202) 481-5719
- E-mail: ombudsman@sba.gov
- Mail: Office of the National Ombudsman
  U.S. Small Business Administration
  409 3rd Street, S.W., MC2120
  Washington, DC 20416-0005

To view the SBREFA Act in its entirety, please visit the following web link:
http://www.sba.gov/advo/laws/sbrefa.html

For more information on SBREFA the following web links may prove helpful:
http://www.sba.gov/ombudsman/
http://www.sba.gov/ombudsman/dsp_overview.html
http://www.sba.gov/ombudsman/dsp_faq.html
http://www.sba.gov/advo/
http://www.sba.gov/advo/laws/is_oshapanel.html

NOTE: Filing a complaint with the SBA Ombudsman does not affect any obligation that you may have to comply with an OSHA citation or other enforcement action. Nor does it mean that you need not take other available legal steps to protect your interests.

OSHA Regional Offices

Region I
(CT,* ME, MA, NH, RI, VT*)
JFK Federal Building, Room E340
Boston, MA 02203
(617) 565-9860

Region II
(NJ,* NY,* PR,* VI*)
201 Varick Street, Room 670
New York, NY 10014
(212) 337-2378

Region III
(DE, DC, MD,* PA, VA,* WV)
The Curtis Center
170 S. Independence Mall West
Suite 740 West
Philadelphia, PA 19106-3309
(215) 861-4900

Region IV
(AL, FL, GA, KY,* MS, NC,* SC,* TN*)
61 Forsyth Street, SW, Room 6T50
Atlanta, GA 30303
(404) 562-2300

Region V
(IL, IN,* MI,* MN,* OH, WI)
230 South Dearborn Street
Room 3244
Chicago, IL 60604
(312) 353-2220

Region VI
(AR, LA, NM,* OK, TX)
525 Griffin Street, Room 602
Dallas, TX 75202
(972) 850-4145

Region VII
(IA,* KS, MO, NE)
Two Pershing Square
2300 Main Street, Suite 1010
Kansas City, MO 64108-2416
(816) 283-8745

Region VIII
(CO, MT, NO, SO, UT,* WY*)
1999 Broadway, Suite 1690
PO Box 46550
Denver, CO 80202-5716
(720) 264-6550

Region IX
(American Samoa, AZ,* CA,* HI,* NV,* and Guam, the Northern Mariana Islands and American Samoa)
90 7th Street, Suite 18-100
San Francisco, CA 94103
(415) 625-2547

Region X
(AK,* ID, OR,* WA*)
1111 Third Avenue, Suite 715
Seattle, WA 98101-3212
(206) 553-5930

* These states and territories operate their own OSHA-approved job safety and health programs and cover state and local government employees as well as private sector employees. The Connecticut, New Jersey, New York and Virgin Islands plans cover public employees only. States with approved programs must have standards that are identical to, or at least as effective as, the Federal OSHA standards.

Note: To get contact information for OSHA Area Offices, OSHA-approved State Plans and OSHA Consultation Projects, please visit us online at www.osha.gov or call us at 1-800-321-0SHA.

Contact Information

The most complete and current information and e-mail addresses for OSHA Regional and Area Offices and the state Consultation Projects can be found on OSHA's website at www.osha.gov/html/oshdir.html or by contacting:

U.S. Department of Labor
Occupational Safety and Health Administration
Directorate of Cooperative and State Programs
Office of Small Business Assistance
200 Constitution Ave., NW
Washington, DC 20210
(800) 321-OSHA

OSHA's Non-Retaliation Policy

The Occupational Safety and Health Administration (OSHA) has a long-established policy that information inquiries received by the agency regarding safety and health regulations or other safety-related subjects shall **not** trigger an inspection. This policy is outlined in *OSHA Instruction CPL 02-00-103 (CPL 2.103), Field Inspection Reference Manual*, Section 5 - Chapter I, B.4.b. The exact wording is:

Employer Contacts. *Contacts for information initiated by employers or their representatives shall not trigger an inspection, nor shall such employer inquiries protect them against regular inspections conducted pursuant to guidelines established by the agency. Further, if an employer or its representatives indicates that an imminent danger exists or that a fatality or catastrophe has occurred, the Area Director shall act in accordance with established inspection priority procedures.*

While exceptions to this policy exist, such as the presence of an imminent danger or the occurrence of a fatality, OSHA policy is to provide assistance to help employers prevent and reduce workplace fatalities, illnesses and injuries.

OSHA®

Occupational Safety
and Health Administration
U.S. Department of Labor
www.osha.gov

PERSONAL PROTECTIVE EQUIPMENT

10 PERSONAL PROTECTIVE EQUIPMENT

Personal protective equipment (PPE) is something that all construction workers wear. It is designed to protect them from physical dangers and/or health hazards.

Equipment such as hard hats, safety glasses, and safety boots are designed to prevent an injury or reduce the severity of an injury if one occurs. Other PPE, such as hearing and respiratory protection, is designed to prevent illnesses and damage to the worker's health.

It is important to remember that PPE only provides protection. It reduces the risk but does not eliminate the hazard. The best way of protecting workers is to control the hazard at the source or along the path. However, if that is not possible, controls need to be put in place at the worker. This concept is referred to as the "hierarchy of controls" (Figure 10-1).

The chapters in this manual on different kinds of PPE (Chapters 10 to 17) will enable users to

- assess hazards and select a suitable control method
- locate and interpret legislation related to PPE
- effectively use and maintain PPE.

Legal Requirements

While common to all trades, PPE varies according to individual, job, and site conditions. Legal requirements for personal protective equipment also vary, so consult appropriate sections of the Construction Projects regulation (O. Reg. 213/91) under the *Occupational Health and Safety Act* (OHSA).

Employers have a duty under the OHSA to provide their workers with the PPE prescribed by law (OHSA, s.25(1)). Although many workers take their own PPE to a job, the employer is ultimately responsible for making sure that the proper PPE is used and is maintained in good condition.

Workers have a duty under the OHSA to wear or use PPE required by the employer (28.(1)(b)). In some situations, the regulations may not require PPE but the employer has set additional health and safety standards for the jobsite, such as mandatory eye protection.

The Construction Projects regulation (O. Reg. 213/91, s.21) requires that a worker wear such protective clothing and use such equipment or devices "as are necessary to protect the worker against the hazards to which the worker may be exposed." It also requires that the worker be trained in the use and care of this equipment.

Engineering Controls

When considering ways to defend against a workplace hazard, personal protective equipment (PPE) should be the last option. PPE is a way to control hazards **at the worker.** Better options are engineering controls that eliminate or reduce as much of the risk as possible **at the source** or **along the path** to the worker (Figure 10-1).

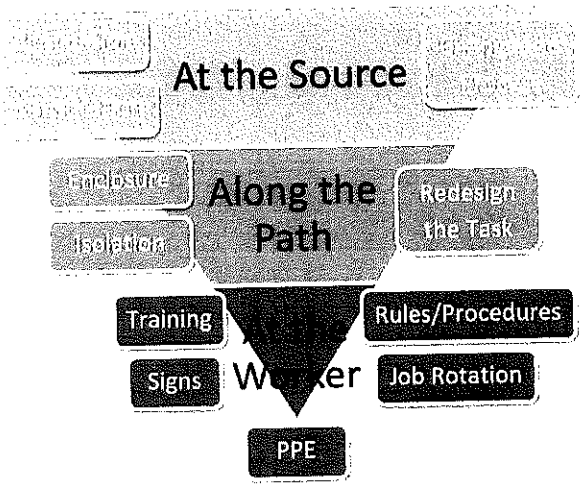

Figure 10-1: Hierarchy of Controls

Engineering controls fall into five categories:

1. Substitution
2. Alternative work methods
3. Isolation
4. Enclosure
5. Ventilation.

Substitution

Use a safer method or material that can do the same job (e.g., a less toxic chemical). A common example is the substitution of calcium silicate or fibreglass insulation for asbestos insulation.

Alternative Work Methods

Find another way to do the job in a way that is less hazardous. For example, brushing or rolling paint produces much lower vapour levels than spray painting. Similarly, wetting asbestos-containing material before removal releases up to 100 times less dust than dry removal. Make sure to check that the new work method is safer.

Isolation

Isolate the worker from the hazard. In a quarry, for example, the operator of a crusher can be isolated from dust by a filtered, air-conditioned cab.

Enclosure

Enclose a substance or procedure to contain toxic emissions. It may be as simple as putting a lid on an open solvent tank or enclosing an asbestos-removal project with polyethylene sheeting (Figure 10-2). Enclosures have also been built around compressors to reduce the noise level. Make sure they do not restrict access when maintenance is required.

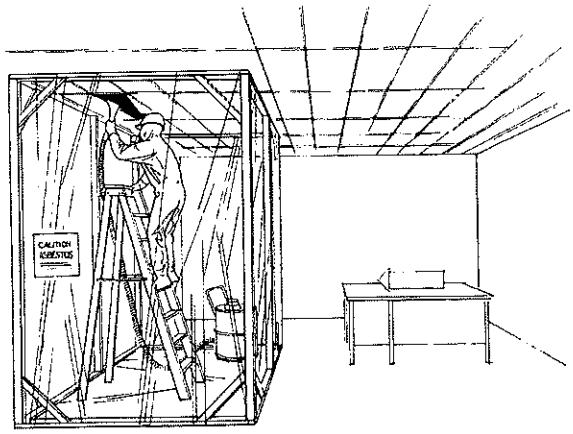

Figure 10-2: Enclosure

Ventilation

Control the amount of contaminant in the air by using ventilation. Local ventilation is better because it removes the contaminant. General ventilation dilutes the amount of contaminant by using large fans to move large volumes of air and increase air exchange. This method is not suitable for highly toxic materials.

Local ventilation captures and removes contaminants at their source. At a shop bench, a fume hood can be constructed to remove dusts and fumes. On sites, portable fume extractors (Figure 10-3) can be used. Remember: many filtering systems can only remove fumes—not gases or vapours.

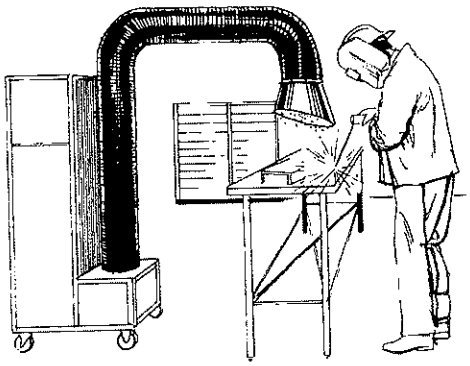

Figure 10-3: Fume Extractor

Personal Protective Equipment

When it is not possible to apply any of the five engineering controls, personal protective equipment may be the only option.

Regulations often refer to the Canadian Standards Association (CSA) or other equipment standards to identify equipment that meets the legal requirements and is acceptable. CSA-certified equipment can be identified by the CSA logo (Figure 10-4).

Figure 10-4: CSA Logo

There are CSA standards for different kinds of personal protective equipment such as these:

- Head Protection – CSA Z94.1-15
- Eye Protection – CSA Z94.3-15 and Z94.3.1-16
- Foot Protection – CSA Z195-14 and Z195.1-16

For respiratory protection, National Institute for Occupational Safety and Health (NIOSH) standards and approvals are usually referenced throughout North America.

For life jackets, Transport Canada certification is the standard reference.

You'll find information on specific types of PPE in the next few chapters.