

Self-Inspection Checklists (taken from OR-OSHA)

Employer Posting

- Is the VOSHA poster, *Job Safety and Health*, displayed in a prominent location where all employees are likely to see it?
Are other Vermont posters or notices properly displayed
- Safety Committee meeting minutes (recommender)?
- OSHA 300 Summary February to April 30th (required)?
- Are emergency telephone numbers posted where they can be readily used in case of emergency?
- Where employees may be exposed to any toxic substances or harmful physical agents, have appropriate information concerning employee access to medical and exposure records and Material Safety Data Sheets (MSDSs) been made readily available to affected employees?
- Are signs regarding exits from buildings, room capacity, floor loading, exposure to X-ray, microwave, or other harmful radiation or substances posted where required?

Recordkeeping

- Are all occupational injuries and illnesses, including those involving loss of life, loss of consciousness, loss of time from work, and those requiring treatment other than first aid, being recorded as required on the OSHA Form 300?
- Are copies of OSHA Form 300 and First Report of Injury, Form 300A, kept for five years?
- Are employee medical records and records of employee exposures to hazardous substances or harmful physical agents current?
- Have arrangements been made to maintain required records for the legal period of time for each specific type of record? (Some records must be maintained for at least 40 years.)
- Are operating permits and records current for such items as elevators, pressure vessels, and liquefied petroleum gas tanks?
- Are employee safety and health training records maintained?
- Is documentation of safety inspections and corrections maintained?

Safety and Health Program

- Do you have top management commitment?
- Have you established labor and management accountability?
- Do you have a system in place for hazard identification and control?
- Do you investigate all incidents and accidents?
- Do you encourage employee involvement in health and safety matters?
- Do you provide occupational safety and health training for your workers and supervisors?
- Do you perform periodic evaluations of the plan?

Medical Services and First Aid

- Has an emergency medical plan been developed?
- Are emergency phone numbers posted?
- Are first-aid kits easily accessible to each work area, with necessary supplies available, periodically inspected and replenished as needed?

- Are means provided for quick drenching or flushing of the eyes and body in areas where caustic or corrosive liquids or materials are handled?

Safety Committees

- Do you have an active safety committee with equal numbers of employer and employee representatives?
- Are records kept documenting safety and health training for each employee by name or other identifier, training dates, type(s) of training, and training provider?
- Does the committee meet at least monthly, or quarterly for office type environments?
- Is a written record of safety committee meetings distributed to affected employees, and maintained?
- Does the safety committee conduct quarterly hazard identification surveys?
- Does the committee review results of periodic, scheduled worksite inspections?
- Does the committee review accident and near-miss investigations and, where necessary, submit recommendations for prevention of future incidents?
- Does the committee involve all workers in the safety and health program?
- Are safety committee minutes kept three years and are each month's minutes posted?
- Has your safety committee developed an accident investigation procedure?
- Has the committee reviewed your safety and health program and made recommendations for possible improvements?
- Have committee members been trained and instructed in safety committee purpose and operation, methods of conducting meetings, VOSHA rules which apply to the workplace, hazard identification, and accident investigation principles?

Fire Protection

- If you have 11 or more employees, do you have a written fire-prevention plan?
- Does your plan describe the type of fire protection equipment and/or systems (if any) that are available for use?
- Have you established practices and procedures to control potential fire hazards and ignition sources?
- Are employees aware of the fire hazards of the materials and processes to which they are exposed?
- If you have a fire alarm system, is it tested at least annually?
- Are sprinkler heads protected by metal guards when exposed to physical damage?
- Is proper clearance maintained below sprinkler heads?
- Are portable fire extinguishers provided in adequate numbers and types?
- Are fire extinguishers mounted in readily assessable locations?
- Are fire extinguishers recharged regularly and then noted on the inspection tag?
- If employees are expected to use fire extinguishers and fire protection procedures, are they trained?
- If employees are not trained to use fire extinguishers, are they trained to immediately evacuate the building?

Personal Protective Equipment and Clothing

- Has there been an assessment of the hazards that might require PPE, including a review of injuries?
- Has the assessment been verified through written certification?
- Does it identify the workplace evaluated?
- Has training been provided to each employee required to wear PPE?
- Has the training been verified through written certification?
- Are protective goggles or face shields provided and worn when there is any danger of flying material or caustic or corrosive materials?
- Are ANSI-approved safety glasses worn at all times in areas where there is risk of eye injury?
- Are protective gloves, aprons, shields, or other protection provided against cuts, corrosive liquids, and chemicals?
- Are hard hats provided and worn where danger of falling objects exists?
- Are hard hats inspected periodically for damage to the shell and suspension system?
- Do workers who are exposed to vehicular traffic wear garments that make them stand out from their surroundings?
- Do workers wear reflective garments at night?
- Are approved respirators provided for regular or emergency use where needed?
- Is there a written respirator program?
- Are the respirators inspected before and after each use?
- Is a written record kept of all inspection dates and findings?
- Have all employees been trained in adequate work procedures, use and maintenance of protective clothing, and proper use of equipment when cleaning up spilled toxic or other hazardous materials or liquids?
- Is a spill kit available to clean up spilled toxic or hazardous materials?
- Where employees are exposed to conditions that could cause foot injury, are safety shoes required to be worn?
- Is all protective equipment maintained in a sanitary condition and ready for use?
- Do you have eyewash facilities and a quick-drench shower within a work area where employees are exposed to caustic or corrosive materials?
- When lunches are eaten on the premises, are they eaten in areas where there is no exposure to toxic materials or other health hazards?
- Is protection against the effects of occupational noise exposure provided when sound levels exceed those of the VOSHA noise and hearing conservation standard?

General Work Environment

- Are all worksites clean and orderly?
- Are walking surfaces kept dry or appropriate means taken to ensure that surfaces are slip-resistant?
- Are all spilled materials or liquids cleaned up immediately?
- Is combustible scrap, debris, and waste stored safely and removed from the worksite promptly?
- Are covered metal waste cans used for oily and paint-soaked waste?

- Are the minimum number of toilets and washing facilities provided?
- Are toilets and washing facilities sanitary?
- Are all work areas adequately lighted?

Walkways

- Are aisles and passageways kept clear and are they at least 22 inches wide?
- Are aisles and walkways appropriately marked?
- Are wet surfaces covered with non-slip materials?
- Are openings or holes in the floors or other treading surfaces repaired or otherwise made safe?
- Is there safe clearance for walking in aisles where vehicles are operating?
- Are materials or equipment stored so sharp objects cannot obstruct the walkway?
- Are changes of direction or elevations readily identifiable?
- Are aisles or walkways that pass near moving or operating machinery, welding operations, or similar operations arranged so employees will not be subjected to hazards?
- Is adequate headroom (of at least 6.5 feet) provided for the entire length of any walkway?
- Are standard guardrails provided wherever aisle or walkway surfaces are elevated more than four feet above any adjacent floor or the ground?
- Are bridges provided over conveyors and similar hazards?

Floor and Wall Openings

- Are floor holes or openings guarded by a cover, guardrail, or equivalent on all sides (except at entrance to stairways or ladders)?
- Are toeboards installed around the edges of a permanent floor opening (where persons may pass below the opening)?
- Are skylight screens of such construction and mounting that they will withstand a load of at least 200 pounds?
- Is the glass in windows, doors, and glass walls (which may be subject to human impact) of sufficient thickness and type for all conditions of use?
- Are grates or similar covers over floor openings, such as floor drains, of such design that foot traffic or rolling equipment will not be caught by the grate spacing?
- Are unused portions of service pits and pits not actually in use covered or protected by guardrails or equivalent?

Stairs and Stairways

- Are standard stair rails and handrails present on all stairways having four or more risers?
- Are all stairways at least 22 inches wide?
- Do stairs have at least 6.5 feet of overhead clearance?
- Do stairs angle no more than 50 degrees and no less than 30 degrees?
- Are step risers on stairs uniform from top to bottom, with no riser spacing greater than 9.5 inches?
- Are steps on stairs and stairways designed or provided with a surface that renders them slip resistant?
- Are stairway handrails located between 30-42 inches above the leading edge of stair treads?
- Do stairway handrails have at least three inches clearance between handrails and the wall or surface they are mounted on?

- Are stairway handrails capable of withstanding a load of 200 pounds applied in any direction?
- Where stairs or stairways exit directly into any area where vehicles may be operated, are adequate barriers and warnings provided to prevent employees from stepping into the path of traffic?

Elevated Surfaces

- Are signs posted, when appropriate, showing elevated floor load capacity?
- Are elevated surfaces (more than four feet above the floor or ground) provided with standard guardrails?
- Are all elevated surfaces (beneath which people or machinery could be exposed to falling objects) provided with standard toeboards?
- Is a permanent means of access/egress provided to elevated work surfaces?
- Is material on elevated surfaces piled, stacked, or racked in a manner to prevent it from tipping, falling, collapsing, rolling, or spreading?
- Are dock boards or bridge plates used when transferring materials between docks and trucks or railcars?
- When in use, are dock boards or bridge plates secured in place?

Exit or Egress

- Are all exits marked with an exit sign and illuminated by a reliable light source, if possibly used in the dark?
- Are the directions to exits, if not immediately apparent, marked with visible signs?
- Are doors, passageways, or stairways that are neither exits nor access to exits, and which could be mistaken for exits, appropriately marked "NOT AN EXIT," or "TO BASEMENT," "STOREROOM," and the like?
- Are exit signs provided with the word "EXIT" in lettering at least six inches high and the stroke of the lettering at least $\frac{3}{4}$ inch wide?
- Are exit doors side-hinged?
- Are all exits kept free of obstructions and unlocked?
- Are at least two means of egress provided from elevated platforms, pits, or rooms where the absence of a second exit would increase the risk of injury from hot, poisonous, corrosive, suffocating, flammable, or explosive substances?
- Are there sufficient exits to permit prompt escape in case of emergency?
- Are the number of exits from each floor of a building and the number of exits from the building itself appropriate for the building occupancy load?
- When workers must exit through glass doors, storm doors and such, are the doors fully tempered and meeting safety requirements for human impact?

Exit Doors

- Are doors required to serve as exits designed and constructed so that the way of exit travel is obvious and direct?
- Are windows (which could be mistaken for exit doors) made inaccessible by barriers or railing?
- Are exit doors able to open from the direction of exit travel without the use of a key or any special knowledge or effort?
- Is a revolving, sliding, or overhead door prohibited from serving as a required exit door?

- When panic hardware is installed on a required exit door, will it allow the door to open by applying a force of 15 pounds or less in the direction of the exit traffic?
- Are doors on cold-storage rooms provided with an inside release mechanism that will release the latch and open the door even if it is padlocked or otherwise locked on the outside?
- Where exit doors open directly onto a street, alley, or other area where vehicles may be operated, are adequate barriers and warnings provided to prevent employees from stepping directly into the path of traffic?
- Are doors that swing in both directions between rooms in which there is frequent traffic, provided with viewing panels in each door?

Portable Ladders

- Are all ladders in good condition, joints between steps and side rails tight, all hardware and fittings securely attached, and moveable parts operating freely without binding or undue play?
- Are nonslip safety feet on all ladders except step ladders?
- Are ladder rungs and steps free of grease and oil?
- Are employees prohibited from placing a ladder in front of doors opening toward the ladder except when the door is blocked open, locked, or guarded?
- Are employees prohibited from placing ladders on boxes, barrels, or other unstable bases to obtain additional height?
- Are employees instructed to face the ladder when ascending/descending?
- Are employees prohibited from using ladders that are broken, missing steps, rungs or cleats, broken side rails, or other faulty equipment?
- Are employees instructed not to use the top step of ordinary stepladders as a step?
- When portable rung ladders are used to gain access to elevated platforms, roofs, and the like, does the ladder always extend at least three feet above the elevated surface?
- Is it required that when portable rung or cleat-type ladders are used, the base is so placed that slipping will not occur, or it is lashed or otherwise held in place?
- Are portable metal ladders legibly marked with signs reading “CAUTION — Do Not Use Around Electrical Equipment” or equivalent wording?
- Are the rungs of ladders uniformly spaced at 12 inches, center to center?

Hand Tools and Equipment

- Are all tools and equipment (both company- and employee-owned) in good working condition?
- Are hand tools such as chisels or punches (that develop mushroomed heads) reconditioned or replaced as necessary?
- Are broken or fractured handles on hammers, axes, or similar equipment replaced promptly?
- Are appropriate handles used on files and similar tools?
- Are appropriate safety glasses, face shields, and similar equipment used while using hand tools or equipment which might produce flying materials or be subject to breakage?
- Are jacks checked periodically to assure that they are in good operating condition?
- Are tool handles wedged tightly in the head of all tools?
- Are tool-cutting edges kept sharp so the tool will move smoothly without binding or skipping?

- Are eye and face protection used when driving hardened or tempered tools, bits, or nails?

Portable (Power-Operated) Tools and Equipment

- Are grinders, saws, and similar equipment provided with appropriate safety guards?
 - Are power tools used with the shield or guard recommended by the manufacturer?
 - Are portable circular saws equipped with guards above and below the base shoe?
 - Are circular saw guards checked to ensure guarding of the lower blade portion?
 - Are rotating or moving parts of equipment guarded to prevent physical contact?
 - Are all cord-connected, electrically-operated tools and equipment effectively grounded or of the approved double-insulated type?
 - Are effective guards in place over belts, pulleys, chains, and sprockets on equipment such as concrete mixers, air compressors, and the like?
 - Are portable fans provided with full guards having openings of $\frac{1}{2}$ inch or less?
 - Is hoisting equipment available and used for lifting heavy objects, and are hoist ratings and characteristics appropriate for the task?
 - Are ground-fault circuit interrupters (provided on all temporary electrical 15, 20, and 30 ampere circuits) used during periods of construction?
- Or
- Do you have an assured equipment-grounding conductor program in place in construction?
 - Are pneumatic and hydraulic hoses on power-operated tools checked regularly for deterioration or damage?

Abrasive Wheel Equipment Grinders

- Is the work rest used and kept adjusted to within $\frac{1}{8}$ inch of the wheel?
- Is the adjustable tongue on the top side of the grinder used and kept adjusted to within $\frac{1}{4}$ inch of the wheel?
- Do side guards cover the spindle, nut, flange, and 75 percent of the wheel diameter?
- Are bench and pedestal grinders permanently mounted?
- Are ANSI-approved goggles or face shields always worn when grinding?
- Is the maximum RPM rating of each abrasive wheel compatible with the RPM rating of the grinder motor?
- Are fixed or permanently mounted grinders connected to their electrical supply system with metallic conduit or by another permanent wiring method?
- Does each grinder have an individual on/off switch?
- Is each electrically-operated grinder effectively grounded?
- Before mounting new abrasive wheels, are they visually inspected and ring tested?
- Are dust collectors and powered exhausts provided on grinders used in operations that produce large amounts of dust?
- To prevent coolant from splashing workers, are splash guards mounted on grinders that use coolant?
- Is cleanliness maintained around grinders?

Machine Guarding

- Is there an employee training program for safe methods of machine operation?
- Is there adequate supervision to ensure that employees are following safe machine operating

procedures?

- Is there a regular program of safety inspection for machinery and equipment?
- Is all machinery and equipment clean and properly maintained?
- Is sufficient clearance provided around and between machines to allow for safe operations, set up and servicing, material handling, and waste removal?
- Is equipment and machinery securely placed and anchored when necessary to prevent tipping or other movement that could result in personal injury?
- Is there a power shut-off switch within reach of the operator's position at each machine?
- Are the noncurrent-carrying metal parts of electrically-operated machines bonded and grounded?
- Are foot-operated switches guarded or arranged to prevent accidental actuation by personnel or falling objects?
- Are manually operated valves and switches (controlling the operation of equipment and machines) clearly identified and readily accessible?
- Are all emergency stop buttons colored red?
- Are all pulleys and belts (that are located within seven feet of the floor or working level) properly guarded?
- Are all moving chains and gears properly guarded?
- Are methods provided to protect the operator and other employees in the machine area from hazards created at the point of operation, ingoing nip points, rotating parts, flying chips, and sparks?
- Are machinery guards secured and arranged so they do not present a hazard in their use?
- If special hand tools are used for placing and removing material, do they protect the operator's hands?
- Are revolving drums, barrels, and containers (required to be guarded by an enclosure that is interlocked with the drive mechanism so that revolution cannot occur) guarded?
- Do arbors and mandrels have firm and secure bearings, and are they free from play?
- Are provisions made to prevent machines from automatically starting when power is restored (following a power failure or shut-down)?
- Are machines constructed so as to be free from excessive vibration (when the largest size tool is mounted and run at full speed)?
- If machinery is cleaned with compressed air, is air pressure controlled and personal protective equipment or other safeguards used to protect operators and other workers from eye and body injury?
- Are fan blades protected with a guard having openings no larger than 1/2 inch when operating within seven feet of the floor?
- Are saws used for ripping equipped with anti-kickback devices and spreaders?
- Are radial arm saws guarded and so arranged that the cutting head will gently return to the back of the table when released?

Lockout/Tagout Procedures

- Is all machinery or equipment (capable of movement) required to be de-energized or disengaged and locked out during cleaning, servicing, adjusting, or setting-up operations?
- Is it prohibited to lock out control circuits in lieu of locking out main power disconnects?
- Are all equipment control valve handles provided with a means of lockout?

- Does the lockout/tagout procedure require that stored energy (i.e., mechanical, hydraulic, air) be released or blocked before equipment is locked out for repairs?
- Are appropriate employees provided with individually keyed personal safety locks?
- Are employees required to keep personal control of their key(s) while they have safety locks in use?
- Is it required that employees check the safety of the lockout by attempting to start up after making sure no one is exposed?
 - Where the power disconnecting means for equipment does not also disconnect the electrical control circuit:
- Are the appropriate electrical enclosures identified?
- Are means provided to assure the control circuit can also be disconnected and locked out?

Welding, Cutting and Brazing

- Are only authorized and trained personnel permitted to use welding, cutting, or brazing equipment?
- Are compressed gas cylinders regularly examined for signs of defect, deep rusting, or leakage?
- Are cylinders kept away from sources of heat?
- Are employees prohibited from using cylinders as rollers or supports?
- Are empty cylinders appropriately marked, their valves closed, and valve-protection caps placed on them?
- Are signs reading: “DANGER — NO SMOKING, MATCHES OR OPEN LIGHTS,” or the equivalent posted?
- Are cylinders, cylinder valves, couplings, regulators, hoses, and apparatus kept free of oily or greasy substances?
- Unless secured on special trucks, are regulators removed and valve-protection caps put in place before moving cylinders?
- Do cylinders without fixed hand wheels have keys, handles, or nonadjustable wrenches on stem valves when in service?
- Are liquefied gases stored and shipped with the valve end up and with valve covers in place?
- Before a regulator is removed, is the valve closed, and then gas released from the regulator?
- Is open circuit (no load) voltage of arc welding and cutting machines as low as possible, and not in excess of the recommended limit?
- Are electrodes removed from the holders when not in use?
- Are employees required to shut off the electric power to the welder when no one is in attendance?
- Is suitable fire-extinguishing equipment available for immediate use?
- Are welders forbidden to coil or loop welding electrode cable around their bodies?
- Are work and electrode lead cable frequently inspected for wear and damage and replaced when needed?
- Do means for connecting cable lengths have adequate insulation?
- When the object to be welded cannot be moved and fire hazards cannot be removed, are shields used to confine heat, sparks, and slag?
- Are fire watchers assigned when welding or cutting is performed in locations where a

serious fire might develop?

- When welding is done on metal walls, are precautions taken to protect combustibles on the other side?
- Before hot work begins, are drums, barrels, tanks, and other containers so thoroughly cleaned and tested that no substances remain that could explode, ignite, or produce toxic vapors?
- Do eye-protection helmets, hand shields, and goggles meet appropriate standards?
- Are employees exposed to the hazards created by welding, cutting, or brazing operations protected with personal protective equipment and clothing?
- Is a check made for adequate ventilation where welding or cutting is performed?
- When employees work in confined spaces, is the atmosphere monitored and are means provided for quick removal of welders in case of an emergency?

Compressors and Compressed Air

- Are compressors equipped with pressure-relief valves and pressure gauges?
- Are compressor air intakes installed and equipped to ensure that only clean, uncontaminated air enters the compressor?
- Are air filters installed on the compressor intake?
- Are compressors operated and lubricated according to the manufacturer's recommendations?
- Are safety devices on compressed-air systems checked frequently?
- Before any repair work is done on the pressure systems of the compressor, is the pressure bled off and the system locked out?
- Are signs posted to warn of the automatic starting feature of the compressors?
- Is the belt drive system totally enclosed to provide protection on the front, back, top, and sides?
- Is it strictly prohibited to direct compressed air toward a person?
- Are employees prohibited from using compressed air at over 29 PSI for cleaning purposes unless they use an approved nozzle with pressure relief and clip guard?
- Are employees prohibited from cleaning clothing with compressed air?
- When using compressed air for cleaning, do employees use personal protective equipment?
- Are high pressure hoses and connections in good repair?
- Before compressed air is used to empty containers of liquid, is the safe working pressure of the container checked?
- When compressed air is used with abrasive blast cleaning equipment, is the operating valve a type that must be held open manually?
- Is it prohibited to use compressed air to move combustible dust if such action could cause the dust to be suspended in the air and cause a fire or explosion?
- If plastic piping is used, is the plastic approved for air line service? (Some ABS is OK — PVC is not.)

Compressed Gas and Cylinders

- Are cylinders with water-weight capacity over 30 pounds equipped (with means for connecting a valve protector or device, or with a collar or recess) to protect the valve?
- Are cylinders legibly marked to clearly identify the gas contained?

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

Industrial Trucks/Forklifts

- Do industrial truck operators meet the new industrial truck operator training requirements adopted in May 1999?
- Is substantial overhead protective equipment provided on high-lift rider equipment?
- Are the required lift-truck operating rules posted and enforced and is the capacity rating posted in plain view of the operator?
- Is directional lighting provided on each industrial truck that operates in an area with less than two footcandles per square foot of general lighting?
- Does each industrial truck have a warning horn, whistle, gong, or other device that can be clearly heard above the normal noise in the operation area?
- Are the brakes on each industrial truck capable of bringing the vehicle to a complete and safe stop when fully loaded?
- Will the industrial truck's parking brake effectively prevent the vehicle from moving when unattended?
- Are industrial trucks operating in areas of flammable gases or vapors, combustible dust, or ignitable fibers approved for such locations?
- Are motorized hand and hand/rider trucks so designed that the brakes are applied and power to the drive motor shuts off when the operator releases his/her grip on the device that controls the travel?
- Are industrial trucks with internal combustion engines, that are operated in buildings or enclosed areas, checked to ensure such operations do not cause harmful concentrations of dangerous gases or fumes?

Spray Finishing Operations

- Is adequate ventilation ensured before spray operations are started?
- Is mechanical ventilation provided when spraying is performed in enclosed areas?
- When mechanical ventilation is provided during spraying operations, is it arranged so that it will not circulate contaminated air?
- Is the spray area free of hot surfaces?

- Is the spray area at least 20 feet from flames, sparks, operating electrical motors, and other ignition sources?
- Are the portable lamps used to illuminate spray areas suitable for use in a hazardous location?
- Is approved respiratory equipment provided and used during spraying operations?
- Do solvents used for cleaning have a flash point of 100°F or more?
- Are fire control sprinkler heads kept clean?
- Are “NO SMOKING” signs posted in the spray areas, paint rooms, paint booths, and paint storage areas?
- Is the spray area kept clean of combustible residue?
- Are spray booths constructed of metal, masonry, or other substantial noncombustible material?
- Are spray booth floors and baffles noncombustible and easily cleaned?
- Is infrared drying apparatus kept out of the spray area during spraying operations?
- Is the spray booth completely ventilated before the drying apparatus is used? Is the electric drying apparatus properly grounded? Do all drying spaces have adequate ventilation?
- Are lighting fixtures for spray booths located outside the booth, and the interior lighted through sealed clear panels?
- Are the electric motors for exhaust fans placed outside booths or ducts?
- Are belts and pulleys inside the booth fully enclosed?
- Do ducts have access doors to allow cleaning?

Confined Spaces

- Has the workplace been evaluated to determine if there are any confined spaces?
- Is there a written permit-confined-space program?
- Is the program available for inspection?
- Are confined spaces thoroughly emptied of any corrosive or hazardous substances, such as acids or caustics, before entry?
- Before entry, are all pipelines to a confined space containing inert, toxic, flammable, or corrosive materials valved off and blanked or disconnected and separated?
- Are all impellers, agitators, or other moving equipment inside confined spaces locked out if they present a hazard?
- Is either natural or mechanical ventilation provided prior to confined-space entry?
- Before entry, are appropriate atmospheric tests performed to check for oxygen deficiency, toxic substances, and explosive concentrations in the confined space?
- Is adequate lighting provided for the work being performed in the confined space?
- Is the atmosphere inside the confined space frequently tested or continuously monitored during the work process?
- Is there an attendant outside the confined space whose sole responsibility is to watch the work in progress, sound an alarm if necessary, and help render assistance?
- Are attendants or other employees prohibited from entering the confined space without lifelines and respiratory equipment if there is an emergency?
- In addition to the attendant, is there at least one other trained rescuer in the vicinity?
- Are all rescuers appropriately trained and using approved, recently inspected equipment?

- Does all rescue equipment allow for lifting employees vertically through a top opening?
- Are rescue personnel trained in first aid and CPR, and are they immediately available?
- Is there an effective communication system for whenever respiratory equipment is used and the employee in the confined space is out of sight of the attendant?
- 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?
- Before gas welding or burning is begun in a confined space, are hoses checked for leaks, compressed-gas bottles removed and torches lighted only outside the confined space area, to be returned to the confined space only after testing for explosive atmosphere?
- When using oxygen-consuming equipment (such as salamanders, torches, furnaces) in a confined space, is air provided to ensure 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 that the exhaust gases are vented outside the enclosure?
- Is each confined space checked for decaying vegetation or animal matter that may produce methane?
- Is the confined space checked for possible industrial waste that could contain toxic properties?
- If the confined space is below the ground and near areas where motor vehicles are operating, is it possible for vehicle exhaust or carbon monoxide to enter the space?

Environmental Controls

- Are all work areas properly lighted?
- Are hazardous substances identified that may cause harm by inhalation, ingestion, skin absorption, or contact?
- Are employees aware of the hazards involved with the various chemicals they may be exposed to in their work environment, such as ammonia, chlorine, epoxies, and caustics?
- Is employee exposure to chemicals in the workplace kept within acceptable levels? Can a less harmful method or product be used?
- Is the work area's ventilation system appropriate for the work being performed?
- Are proper precautions taken by employees handling asbestos and other fibrous materials?
- Are caution labels and signs used to warn of asbestos?
- Is the possible presence of asbestos determined prior to the beginning of any repair, demolition, construction, or reconstruction work?
- Are asbestos-covered surfaces kept in good repair to prevent release of fibers?
- Are wet methods used (when practicable) to prevent emission of airborne asbestos fibers, silica dust, and similar hazardous materials?
- Is vacuuming with appropriate equipment conducted, rather than blowing or sweeping dust?
- Are grinders, saws, and other machines that produce respirable dust vented to an industrial collector or a central-exhaust system?
- Are all local-exhaust ventilation systems designed and operated properly (at the airflow and volume necessary) for the application? Are the ducts free of obstructions? Have you ensured that belts are not slipping?

- Is personal protective equipment provided, used, and maintained whenever required?
- Are there written standard operating procedures for the selection and use of respirators?
- Are restrooms and washrooms kept 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 instructed how to properly lift heavy objects?
- Where heat is a problem, have all fixed work areas been provided with a proper means of cooling?
- Are employees working on streets and roadways, where they are exposed to the hazards of traffic, required to wear high-visibility clothing?
- Are exhaust stacks and air intakes located so that contaminated air will not be recirculated within a building or other enclosed area?

Flammable and Combustible Materials

- Are combustible scrap, debris, and waste materials stored in covered metal receptacles and removed from the worksite promptly?
- Are proper storage methods used to minimize the risk of fire and spontaneous combustion?
- Are approved containers and tanks used for the storage and handling of flammable and combustible liquids?
- Are all connections on drums and combustible liquid piping (vapor and liquid) tight?
- Are all flammable liquids kept in closed containers when not in use?
- Are bulk drums of flammable liquids grounded and bonded to containers during dispensing?
- Do storage rooms for flammable and combustible liquids have explosion-proof lights?
- Do storage rooms for flammables and combustible liquids have mechanical or gravity ventilation?
- Are safe practices followed when liquid petroleum gas is stored, handled, and used?
- 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 fire separators placed between stacked containers of combustibles or flammables to ensure their support and stability?
- Are fuel-gas cylinders and oxygen cylinders separated by distance, fire-resistant barriers, or other means while in storage?
- Are fire extinguishers provided for the type of materials they will extinguish, and placed in areas where they are to be used?
 - CLASS A: Ordinary combustible materials fires
 - CLASS B: Flammable liquid, gas, or grease fires
 - CLASS C: Energized-electrical equipment fires
- If a Halon 1301 fire extinguisher is used, can employees evacuate within the specified time (for that extinguisher)?
- Are appropriate fire extinguishers mounted within 75 feet of outside areas containing flammable liquids, and within 10 feet of any inside storage area for such materials?
- Is the transfer/withdrawal of flammable or combustible liquids performed by trained

personnel?

- Are fire extinguishers mounted so that employees do not have to travel more than 75 feet for a Class A fire or 50 feet for a Class B fire?
- Are employees trained in the use of fire extinguishers?
- Are all extinguishers serviced, maintained, and tagged at intervals not to exceed one year? Is a record maintained of required monthly checks of extinguishers?
- Are all extinguishers fully charged and in their designated places? Are extinguishers free from obstruction or blockage?
- Where sprinkler systems are permanently installed, are the nozzle heads directed or arranged so that water will not be sprayed into operating electrical switchboards and equipment?
- Are "NO SMOKING" signs posted in areas where flammable or combustible materials are used or stored?
- Are "NO SMOKING" signs posted on liquefied petroleum gas tanks?
- Are "NO SMOKING" rules enforced in areas involving storage and use of flammable materials?
- Are safety cans used for dispensing flammable or combustible liquids?
- Are all spills of flammable or combustible liquids cleaned up promptly?

Hazardous Chemical Exposures

- Is employee exposure to chemicals kept within acceptable levels?
 - o Are eyewash fountains and safety showers provided in areas where caustic corrosive chemicals are handled?
- Are all employees required to use personal protective clothing and equipment (gloves, eye protection, respirators) when handling chemicals?
- Are flammable or toxic chemicals kept in closed containers when not in use?
- Where corrosive liquids are frequently handled in open containers or drawn from storage vessels or pipelines, are adequate means provided to neutralize or dispose of spills or overflows (properly and safely)?
- Have standard operating procedures been established, and are they being followed when chemical spills are cleaned up?
- Are respirators stored in a convenient and clean location?
- Are emergency-use respirators adequate for the various conditions under which they may be used?
- Are employees prohibited from eating in areas where hazardous chemicals are present?
- Is personal protective equipment provided, used, and maintained whenever necessary?
- Are there written standard operating procedures for selecting and using 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 NIOSH-approved for particular applications?
- Are respirators inspected and cleaned, sanitized, and maintained regularly?
- Are you familiar with the Threshold Limit Value (TLV) or Permissible Exposure Limit (PEL) of airborne contaminants and physical agents used in your workplace?

- Have you considered having an industrial hygienist or environmental health specialist evaluate your work operations?
- If internal combustion engines are used, is carbon monoxide kept within acceptable levels?
- Is vacuuming used rather than blowing or sweeping dusts whenever possible for cleanups?

Hazard Communication

- Have you compiled a list of hazardous substances that are used in your workplace?
- Is there a written hazard communication program dealing with material safety data sheets (MSDSs), labeling, and employee training?
- Is someone responsible for MSDSs, container labeling, and employee training?
- Is each container for a hazardous substance (vats, bottles, storage tanks) labeled with product identity and a hazard warning that communicates specific health and physical hazards?
- Is there an MSDS readily available for each hazardous substance used?
- Do you inform other employers whose employees share a work area with your employees, where hazardous substances are used?
- Do you have an employee training program for hazardous substances? Does this program include:
 - An explanation of what an MSDS is, and how to obtain and use one?
 - The contents of the MSDS for each hazardous substance or class of substances?
 - Informing employees where they can review the employer's written hazard communication program, and where hazardous substances are located in work areas?
 - Explaining the physical and health hazards of substances in the work area, how to detect their presence, and specific protective measures to be used?
 - Hazard communication program details including labeling system and MSDS use?
 - How employees will be informed of hazards of non-routine tasks and hazards of unlabeled pipes?

Electrical Safety

- Are your workplace electricians familiar with VOSHA electrical safety rules?
- Do you require compliance with VOSHA rules on all contract electrical work?
- Are all employees required to report (as soon as practical) any obvious hazard to life or property observed in connection with electrical equipment or lines?
- Are employees instructed to make preliminary inspections and/or appropriate tests to determine what conditions exist before starting work on electrical equipment or lines?
- When electrical equipment or lines are to be serviced, maintained, or adjusted, are necessary switches opened, locked out, and tagged?
- Are portable hand-held electrical tools and equipment grounded or are they of the double-insulated type?
- Are electrical appliances such as vacuum cleaners, polishers, and vending machines grounded?
- Do extension cords have a grounding conductor? Are multiple plug adaptors prohibited?
- Are ground-fault circuit interrupters installed on each temporary 15, 20, or 30 ampere, 125-volt AC circuit at locations where construction, demolition, modifications, alterations, or excavations are being performed?

Or

- Do you have an assured equipment-grounding conductor program in place?
- Are all temporary circuits protected by suitable disconnecting switches or plug connectors at the junction with permanent wiring?
- Is exposed wiring and cords with frayed or deteriorated insulation repaired or replaced promptly?
- Are flexible cords and cables free of splices or taps?
- Are clamps or other securing means provided on flexible cords or cables at plugs, receptacles, tools, equipment, and is the cord jacket securely held in place?
- Are all cords, cable, and raceway connections intact and secure?
- In wet or damp locations, are electrical tools and equipment appropriate for the use or locations (or otherwise protected)?
- Are electrical power lines and cables located (overhead, underground, underfloor, other side of walls) before digging, drilling, or similar work begins?
- Is the use of metal measuring tapes, ropes, hand lines, or similar devices with metallic thread woven into the fabric prohibited where these could come into contact with energized parts of equipment or circuit conductors?
- Is the use of metal ladders prohibited in areas where the ladder or the person using the ladder could come into 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 or 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) of electrical enclosures and fittings closed with appropriate covers, plugs, or plates?
- Are electrical enclosures such as switches, receptacles, and junction boxes provided with tight-fitting covers or plates?
- Are employees prohibited from working alone on energized lines or equipment over 600 volts?
- Are employees forbidden from working closer than 10 feet from high-voltage (over 750 volts) lines?

Noise

- Are there areas in your workplace where continuous noise levels exceed 85 dBA? (To determine maximum allowable levels for intermittent or impact noise, see VOSHA's noise and hearing conservation standard.)
- Are noise levels measured using a sound-level meter or an octave band analyzer, and are you keeping records of these levels?
- Have you tried isolating noisy machinery from the rest of your operation? Have engineering controls been used to reduce excessive noise?

- Where engineering controls are not feasible, are administrative controls (worker rotation) being used to minimize individual employee exposure to noise?
- Is there a preventive health program that educates employees about safe levels of noise and exposure, effects of noise on their health, and use of personal protection?
- Are employees who are exposed to continuous noise above 85 dBA retrained annually?
- Have work areas in which noise levels make voice communication difficult been identified and posted?
- Is approved hearing protection equipment (noise attenuating devices) used by every employee working in areas where noise levels exceed 90 dBA?
- Are employees properly fitted and instructed in the proper use and care of hearing protection?
- Are employees who are exposed to continuous noise above 85 dBA given periodic audiometric testing to ensure that you have an effective hearing-protection system?

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 personal use?
- When hazardous substances are transported through above-ground piping, is each pipeline identified?
- Have asbestos-covered pipelines been identified?
- When pipelines are identified by colored paint, are all visible parts of the line well identified?
- When pipelines are identified by color-painted bands or tapes, are these located at reasonable intervals, and at each outlet, valve, or connection?
- When pipelines are identified by color, is the color code posted at all locations where confusion could introduce hazards to employees?
- When the contents of pipelines are identified by name or abbreviations, 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 material, the message clearly and permanently distinguishable, and 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

- Are materials stored in a manner to prevent sprain or strain injuries to employees when retrieving the materials?
- Is there safe clearance for equipment through aisles and doorways?
- Are aiseways permanently marked and kept clear to allow safe passage?
- Are motorized vehicles and mechanized equipment inspected daily or prior to use?
- Are vehicles shut off and brakes set prior to loading and unloading?
- Are containers of combustibles or flammables, when stacked while being moved, always separated by dunnage sufficient to provide stability?
- Are dock boards (bridge plates) used when loading and unloading operations are taking place between vehicles and docks?

- Are trucks and trailers secured from movement during loading and unloading?
- 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 materials from falling off?
- Are chutes and gravity-roller sections firmly placed or secured to prevent displacement?
- At the delivery end of rollers or chutes, are provisions made to brake the movement of materials?
- Are materials handled at a uniform level to prevent lifting or twisting injuries?
- Are material-handling aids used to lift or transfer heavy or awkward objects?
- Are pallets usually inspected before loading or moving?
- Are hooks with safety latches or other devices used when hoisting materials so that slings or load attachments won't accidentally slip off the hoist hooks?
- Are securing chains, ropes, chokers or slings adequate for the job being performed?
- When equipment or materials are being hoisted, do you ensure that no one will be passing under suspended loads?

Cranes and Hoists

- Are cranes visually inspected for defective components prior to the start of any work shift?
- Are all electrically-operated cranes effectively grounded?
- Is a crane preventive maintenance program established?
- Is the load chart clearly visible to the operator?
- Are all operators trained, and provided with the operator's manual for the particular crane being operated?
- Have operators of construction industry cranes of 5-ton or greater capacity been issued a valid operator's card?
- Are operating controls clearly identified?
- Is a fire extinguisher provided at the operator's station?
- Is the rated capacity visibly marked on each crane?
- Is an audible warning device mounted on each crane?
- Is sufficient lighting provided for the operator to perform the work safely?
- Are cranes with booms that could fall backwards, equipped with boomstops?
- Does each crane have a certificate indicating that required testing and examinations have been performed?
- Are crane inspection and maintenance records maintained and available for inspection?

Transporting Employees and Materials

- Do employees operating vehicles on public thoroughfares have operator licenses?
- Are motor vehicle drivers trained in defensive driving and proper use of the vehicle?
- Are seat belts provided and are employees required to use them?
- Does each van, bus, or truck used to transport employees have an adequate number of seats?
- When employees are transported by truck, are provisions provided to prevent their falling from the vehicle?

- When transporting employees, are vehicles equipped with lamps, brakes, horns, mirrors, windshields, and turn signals that are in good repair?
- Are transport vehicles provided with handrails, steps, stirrups, or similar devices that have been placed and arranged so employees can safely mount or dismount?
- Is a fully-charged fire extinguisher, in good condition, with at least “4 B:C” rating maintained in each employee transport vehicle?
- When sharp-edged cutting tools 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 can shift, topple, or otherwise become unstable?
- Are materials that could shift and enter the cab secured or barricaded?

Split Rim and Multi-piece Wheel Tire Inflation

- In areas where tires are mounted and/or inflated on drop-center wheels, is a safety procedure posted and enforced?
- Where tires are mounted and/or inflated on wheels with split rims and/or retainer rings, is a safety procedure posted and enforced?
- Does each tire inflation hose have a clip-on chuck with at least 24 inches of hose between the chuck and an inline 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 used while inflating tires mounted on split rims or rims using retainer rings?
- Are employees forbidden from being directly over or in front of a tire while it is being inflated?

Emergency Action Plan

- Have you developed an emergency-action plan?
 - Have emergency-escape procedures and routes been developed and communicated to all employees?
 - Do employees who must complete critical plant operations before evacuating know the proper procedures?
 - Is the employee alarm system that provides warning for emergency action recognizable and perceptible above ambient conditions?
 - Are alarm systems properly maintained and tested regularly?
 - Is the emergency-action plan reviewed and revised periodically?
- Do employees know their responsibilities:
- For reporting emergencies?
 - During an emergency?
 - For performing rescue and medical duties?

Infection Control

- Are employees potentially exposed to infectious agents in body fluids?
- Have occasions of potential occupational exposure been identified and documented?
- Has a training and information program been provided for employees exposed to or potentially exposed to blood and/or regulated body fluids?

- Have infection-control procedures been instituted where appropriate, such as ventilation, universal precautions, workplace practices, and personal protective equipment?
- Are employees aware of specific workplace practices for handwashing, handling sharp instruments, handling laundry, disposal of contaminated materials, reusable equipment, etc.?
- Is personal protective equipment provided for and available to employees?
- Is the necessary equipment (mouthpieces, resuscitation bags, other ventilation devices) provided for administering mouth-to-mouth resuscitation on potentially infected patients?
- Are supplies and equipment available to allow employees to comply with workplace practices, e.g., handwashing sinks, biohazard tags and labels, sharps containers, and detergents/disinfectants to clean up spills?
- Are environmental and working surfaces and equipment cleaned and disinfected after contact with blood or potentially infectious materials?
- Is infectious waste placed in closable, leak-proof containers, bags, or puncture-resistant holders with proper labels?
- Has medical surveillance including HBV evaluation, antibody testing, and vaccination been made available to potentially exposed employees?

How often is training done and does it cover:

- Universal precautions?
- Personal protective equipment?
- Workplace practices, which should include blood drawing, room cleaning, laundry handling, and cleanup of blood spills?
- Needlestick exposure/management?
- Hepatitis B vaccination?

Ergonomics

- Can the work be performed without eyestrain or glare to the employees?
- Can the task be done without repetitive lifting of the arms above the shoulder level?
- Can the task be done without the worker having to hold his/her elbows out and away from the body?
- Can workers keep their hands/wrists in a neutral position when working?
- Are mechanical assists available to the worker performing materials-handling tasks?
- Can the task be done without having to stoop the neck and shoulders to view the work?
- Are pressure points on any part of the body (wrists, forearms, backs of thighs) being avoided?
- Can the work be done using the larger muscles of the body?
- Are there sufficient rest breaks, in addition to scheduled rest breaks, to relieve stress from repetitive-motion tasks?
- Are tools, instruments, and machinery shaped, positioned, and handled so that tasks can be performed comfortably?
- Are all pieces of furniture adjusted, positioned, and arranged to minimize strain on the body?
- Are lifts confined within the knuckle-to-shoulder zone?
- Is work arranged so that workers are not required to lift and carry too much weight?
- If workers have to push or pull objects using great amounts of force, are mechanical aids provided?

Ventilation for Indoor Air Quality

- Does your HVAC system provide at least the quantity of outdoor air designed into the system at the time the building was constructed?
- Is the HVAC system inspected at least annually and maintained in a clean and efficient manner?
- Are efforts made to purchase furnishings or building treatments that do not give off toxic or offensive vapors?
- Are indoor air quality complaints investigated, and are the results conveyed to workers?

Video Display Terminals (VDTs)

- Can the work be performed without eye strain or glare to the employees?
- Can workers keep their hands/wrists in a neutral position when working?
- Can the task be done without having to stoop the neck and shoulders to view the task?
- Are pressure points on any part of the body (wrists, forearms, backs of thighs) being avoided?
- Are there sufficient rest breaks, in addition to scheduled rest breaks, to relieve stress from repetitive-motion tasks?
- Are all pieces of furniture adjusted, positioned, and arranged to minimize strain on the body?
- Are fixed work postures avoided in the task?

Recommended VDT Workstation Criteria

- Height of work surface: Adjustable from 23-29 inches.
- Width of work surface: At least 30 inches wide, but must have sufficient space for VDT and paperwork.
- Viewing distance (eye-to-screen): 16-29 inches.
- Thickness of work surface: 1 inch.
- Eyes in relation to screen: Topmost active line of display should not be higher than user's normal line of sight. Employees who use bifocals or trifocals will require a lower height, which must be set individually.
- Leg clearance height: Minimum of 26.2 inches.
- Leg clearance width: 20 inches minimum. (ANSI's preferred minimum is 24 inches.)
- Leg clearance depth: Minimum of 15 inches knee level; 23.5 inches toe level.
- Seat height: Adjustable 16-23 inches.
- Seat pan dimensions: 13-17 inches depth; minimum of 18.2 inches width; "waterfall" front edge.
- Seat slope: Adjustable 0-10 degrees forward and backward slope.
- Backrest size: 15-20 inches high; 13 inches wide.
- Backrest height: Adjustable 3-6 inches above seat.
- Backrest tilt: Adjustable 15 degrees (approximately 7.5 degrees to both sides of vertical).
- Angle between backrest and seat: Adjustable between 90-105 degrees.
- Angle between seat and lower leg: 60-100 degrees.
- Angle between upper arm and forearm to keyboard: Greater than 70 degrees and less than 135 degrees. Hands should be in a reasonably straight line with the forearm.

Additional VDT workstation criteria

- Fixed work surfaces: The table surface should be between 28 and 30 inches high, with an adjustable keyboard and mouse tray.
- VDT stands: Use height-adjustable VDT stands in all new installations. For VDT stations that are shared or have more than one operator, an adjustable-height VDT stand is required.
- Seats: Use swivel chairs on a five-point base that are pneumatically adjustable from the seated posture.
- Footrests: Use if an operator cannot keep both feet flat on floor when chair height is properly adjusted to the work surface.
- Keyboards: Traditional, split, or ergonomic should be considered.
- Mice or other positioning devices: Position the device at the same height as the keyboard. When the operator's hand is on the device, the hand, wrist, and forearm should be in a reasonably straight line and the elbows should be next to the body.
- Screens: Must be readable with no perceptible flicker; brightness and contrast control necessary.
- Glare control:
 - Ensure that the VDT screen is placed at right angles to windows and that screens have tilt and swivel adjustments.
 - Use window curtains, drapes, or blinds to control glare.
 - Use lighting levels at 20-50 footcandles when using a VDT; 50-70 footcandles where documents are read, compared to normal paperwork-only office lighting levels of 75-160 footcandles.
 - Use cube louvres or parabolic louvres to reduce overhead-lighting glare.
 - Ensure that work surfaces have anti-glare (matte) finish.
 - Use movable task or desk lights; position VDTs between rows of overhead lighting; screen filters and/or hoods if necessary.
- Cables and cords: Keep concealed, covered, or out of the way.
- Ventilation: Use additional ventilation or air conditioning to overcome heat generated by more than one VDT workstation in the same room.
- Temperature and humidity: Maintain thermal comfort and 40-60 percent relative humidity.
- Noise: Use acoustical enclosures for printers if sound levels exceed 55 dBA. Isolate main CPUs and disk drives.
- Training: Train operators to adjust workstation components, such as chairs, monitors, and document holders.
- Fatigue control: Encourage good operator posture, body and eye exercises, rest pauses, and job rotation or substitution of less-demanding tasks.
- Vision problems: Evaluate operators who may need to wear glasses or bifocals. Recommend that operators obtain a vision exam if problems persist.
- Psychosocial issues: Include operator in the selection process; facilitate communication between operators and supervisors; choose user-friendly software; provide training for set-up, adjustment, and risks associated with performing the job.