



TRIOVEST REALTY ADVISORS INC.

Contractor Health & Safety Guide

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This booklet is intended to be a guide and reference for contractors doing work in buildings managed by Triovest Realty Advisors Inc.

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PROCEDURES

Obtain prior approval from the Triovest Representative before bringing any chemical substance (gas, liquid, solid) on to customer property. You must submit a list of all chemicals along with acceptable Manufacturer's Material Safety Data Sheets to the Triovest Representative to obtain this approval.

Contractor chemicals cannot be stored on site without prior approval from the Triovest Representative. For special jobs where large quantities of chemicals are needed, a request for a designated temporary chemical storage area must be submitted to the Triovest Representative for approval by the chemical coordinator. On site storage must be kept to an absolute minimum.

Certain contractual jobs on site may require that you use special protective equipment/clothing. Such equipment/clothing shall be provided by your employer. Adequate ventilation must be maintained at all times when paints, solvents or adhesives are used.

No liquid/powder chemical substance is to be discharged into any drain without specific approval by the Triovest Representative.

Flammable solvents and materials must not be used when possible sources of ignition exist. Flammable paints and solvents may be stored in the building if, and only if, they are contained in an approved flammable storage cabinet. Incompatible chemicals must never be stored together, e.g. acids and flammables.

Flammable liquids must be dispensed in approved safety cans with flash arrestors bearing a Factory Mutual, Underwriters' or CSA Approval. These containers must be clearly identified as to their contents with a contractor's chemical label.

Report all chemical spills or an accident immediately to the Triovest Representative.

DESIGNATED SUBSTANCES

Your employer is responsible for all medical surveillance and medical records of your exposure to a designated substance. Refer to the specific exposure type section of the occupational Health and Safety Act for detailed instruction on each substance.

Hazardous Materials

Controlled products under **WHMIS** include six classes:

CLASS A	Compressed gas (e.g. acetylene, nitrogen, oxygen)
CLASS B	Flammable and combustible material (e.g. solvents).
CLASS C	Oxidizing material (e.g. epoxy hardeners).
CLASS D	Poisonous and infectious material.
DIVISION 1	Immediate and serious toxic effects (e.g. solvents, coating, sealers).
DIVISION 2	Other toxic effects (e.g. asbestos, silica).
DIVISION 3	Biohazardous infectious material (not normally encountered in construction or office environments).
CLASS E	Corrosive material (e.g. acids and alkalis).
CLASS F	Dangerously reactive material (e.g. acetylene)

All workers must be trained in WHMIS and be aware of the hazardous substances they are using for their own protection and for the welfare of others as well.

WORKPLACE LABEL

The workplace label is required when the supplier label is damaged, or if one worker transfers from one container to another more than 300 ml. (10 oz.) and does not use it all themselves or gives part to another worker. When any assistance is required with WHMIS class products, a Triovest Representative shall give assistance.

MATERIAL SAFETY DATA SHEETS (MSDS)

MSDS's require the following:

- Product information
- Hazardous Ingredients
- Physical Data
- Fire and Explosion Data
- Reactivity Data
- Toxicological Properties: health effects information
- Preventive Measures
- First Aid Measures
- Preparation Information: name and telephone number of party preparing the MSDS, date of preparation

INTRODUCTION

Trioest Realty Advisors Inc. believes that safety is an important component of every job and operation. Therefore, any work done on a Trioest site must be performed in a safe manner. It must comply with Trioest Safety Standards, Occupational Health & Safety Acts and Regulations, your employer's and customer's safety requirements and with the laws of the respective province.

This guide has been prepared to assist you in the safe completion of your work while on Trioest's site. It should be referred to at all times when performing work.

It is your responsibility to ensure that you are familiar with these specifications and that you adhere to them at all times during your presence on a customer's premise.

In no circumstance is the Contractor's Guide to overrule the requirements of the Occupational Health and Safety Act and Regulations, or any other applicable laws and regulations.

If you have questions concerning the safety of an operation or activity, please contact your employer immediately.

SUB CONTRACTORS TO TRIOEST

All sub trades on our projects will co-operate and conform to the above.

All sub trades will comply and conform to all Trioest Safety Standards, Occupational Health & Safety Acts and Regulations, your employer's and customer's safety requirements and with the laws of the respective province.

HOUSEKEEPING

- 1) Material, tools and equipment must be carefully stacked and located so as not to block aisles, doors, self-contained breathing apparatus, fire extinguishers, fire blankets, stretchers, emergency eyewash fountains, emergency safety showers, fixed ladders, stairways, fire-aid stations, elevators, etc. Proper contractor storage areas will be designated by the Triovest Representative.
- 2) Nails protruding from boards must be removed or bent over.
- 3) Form and scrap lumber and all other debris must be kept clear of all work areas.
- 4) Combustible scrap, waste materials and debris must be removed at regular and frequent intervals, during the day, and the removal must be in compliance with any Federal/Provincial Waste Management and Environmental Legislation.
- 5) Obtain the Triovest Representative's approval for the use and location of a large disposal container.
- 6) Overhead storage of debris, tools, equipment, etc., is prohibited. No loose material should be left in the area above suspended ceiling panels.

WARNING SIGNS

Warning, safety and security signs and barriers are posted for your protection. They must be observed. Additionally, you shall provide and post warning signs, barriers, barricades, etc., wherever such protection is needed. Where signs and barricades do not provide adequate protection, particularly along a road or walkway, flagmen shall be used.

CHEMICAL CONTROL

Workplace Hazardous Materials Information System

Right to Know

WHMIS gives everyone the right to know about the hazards of materials they work with and provides the means to find out that information. It does this by a three-pronged approach involving labels, material safety data sheets (MSDS's) and worker training and education.

FLOOR OPENINGS/MANHOLES

- 1) Floor openings and manholes must be guarded by substantial and properly secured barriers, railings, or covering material substantial enough to sustain twice the load of pedestrian or vehicular traffic and must be approved by the Triovest Representative.
- 2) Where a danger of falling exists, elevated floor areas must be provided with guardrails. In addition, toe-boards should be provided when the possibility of falling objects striking personnel below exists.

ROOF WORK

- 1) At least two employees must be present during all work on roofs.
- 2) During all rooftop operations within 10 feet of the roof edge, the contractor must have a properly secured safety harness or a safety railing that meets all legal requirements along the roof edge.
- 3) An exception to these requirements is work involving a “walk along inspection” where no tools are needed. In this case the worker shall restrict themselves to being no closer than 3 metres from a roof edge unless there is a 42” retaining wall on the roof.

POWDER-ACTUATED TOOLS

- 1) Explosive/Powder-actuated tools are not to be used on premises unless specific approval in each instance is obtained from the Triovest Representative.
- 2) Explosive/Power-actuated fastening tools must meet the design requirements of the Canadian Standards Safety Code Z166 and if they do not meet these design standards they cannot be used on the premises.
- 3) A tool must never be left unattended in a place where it would be available to unauthorized persons.
- 4) The tool must not be used in explosive or flammable atmosphere.

SUMMARY

This is a summary of some of the key rules of safety and conduct, which apply to you and your job.

- Obey security procedures on Triovest’s and customer’s sites.
- Observe the speed limits posted on the premise. No parking in restricted areas.
- Use only those entrances to a building designated by your Triovest Representative. Emergency exits shall be used only in an emergency.
- **A permit or approval** must be obtained before:

Doing any cutting/welding/burning/soldering.

Entering a confined space

Going out on a roof.

Using a combustion engine indoors.

Using a powder-actuated tool.

Using chemicals.

Excavating

Disturbing asbestos.

Moving/isolating emergency equipment.

Operating any valves, switches or controls.

Shutting off power and utilities.

- Do not enter a confined space until the atmosphere has been checked and deemed to be safe.
- Do not perform any work directly over the heads of people or leave any tools and equipment overhead.
- Isolate your work area with safety markers, tape, barriers, etc.
- If you are not sure of the safety rules that apply to your job, contact your employer.

The rules and regulations covered in this booklet are not all inclusive. Ask your employer for the additional safety instructions and standards required by law that applies to your job (such as, Occupational Health & Safety Act and Regulations, the Worker’s Compensation Act, WHIMS, etc.).

TRIOVEST MANAGEMENT DUTIES/RESPONSIBILITIES

1. To obtain a copy of the contractors safety program.
2. To advise the contractor of Triovest site specific safety guidelines.
3. To ensure contractors have up-to-date accounts with Worker's Compensation Board.
4. To ensure proper coverage exists with insurance prior to completing work on a Triovest site.

CONTRACTOR PROJECT SUPERVISION DUTIES/RESPONSIBILITIES

1. To promote and ensure safety at all times
2. To work with site supervisor (i.e. foreperson) to ensure compliance with the appropriate Acts, Regulations and Site Rules.
3. To ensure internal accidents are reported to management immediately.
4. To ensure Sub Contractors and Suppliers receive and adhere to Triovest Contractor's Guidelines.

CONTRACTOR'S FOREPERSON DUTIES/RESPONSIBILITIES

(*Hereafter Foreperson means person with authority over other workers or a work site, e.g. lead hand, service person).

It is the responsibility of the contractor to designate the foreperson as a safety representative to oversee the contract. The contractor representative must be knowledgeable of the applicable Provincial Health & Safety Act and Regulations and the Triovest Contractor's Guidelines.

1. Foreperson should lead by example.
2. Foreperson's knowledge of Act will ensure appropriate laws; regulations and safety policies are followed.
3. Ensure all workers are familiar with site-specific hazards.
4. Ensure correct Material Safety Data Sheets are on site and available to site personnel.
5. Ensure appropriate tools and equipment are on site and in good/safe working condition.
6. **Ensure all workers have received and read this Booklet.**
7. Advise management of any violation of this Policy.

TOOLS AND EQUIPMENT

- 1) You are responsible for supplying all tools and equipment necessary for the completion of your work. The use of Triovest's owned tools and equipment is not permitted except where specifically authorized by the Triovest Representative.
- 2) Hand and power tools should be kept in safe operating condition. Mushroomed heads on cold chisels, star drills, etc., are unsafe and should not be used. Hammers should have handles, which are not cracked, split or broken. Wrenches should not be overstrained by extending the handle with a pipe or by other means. The jaws of pipe wrenches should be inspected regularly and replaced if worn or cracked.
- 3) Electrical tools must either be grounded (3-wire), double insulated or be used with "ground-fault interrupter" protection. Power tool cords and extension cords should be inspected regularly and replaced if worn or cracked.
- 4) Do not leave your tools and other materials or stepladders; scaffolds, roof or other places where they may be dislodged and fall or where they may create a trip hazard.
- 5) Non-sparking tools are necessary in certain areas where flammable chemicals are handled or where sparks could create an explosion.

EXCAVATIONS AND TRENCHES

- 1) Before doing any excavation work, the existence and location of underground pipes, electrical conductors, etc., must be determined. To obtain this information, your employer must contact the Triovest Representative. Such services should be rendered inoperative before any work is performed.
- 2) The walls and faces of all excavations and trenches more than 1.2 metres (4 ft.) deep must be guarded by shoring, sloping of the ground or some other equivalent means.
- 3) Conduct daily inspections of excavations. If there is evidence of possible cave-ins or slides, all work in the excavation shall cease until the necessary safeguards have been taken.
- 4) Trenches more than 1.2 metres (4 ft.) deep are confined spaces and must have ladders or steps located so as to require no more than 15.2 metres (50 ft.) of lateral travel between means of access.

- 6) Carts, tools, materials and equipment shall not be left unattended in aisles or stairways.

WORKERS DUTIES/RESPONSIBILITIES

1. Adhere to Occupational Health & Safety Act and Regulations.
2. Know and adhere to this Booklet
3. Abide by all site-specific rules and regulations (e.g. Protective eyewear, no smoking, etc.).
4. Avoid horseplay and feats of strength
5. Assist in the investigation and report **immediately** to your immediate supervisor any injury requiring medical or first aid attention
6. Maintain good housekeeping practices.
7. Do not perform unsafe work or enter into unsafe conditions without prior thought and proper equipment.

GENERAL RULES AND REQUIREMENTS

ACCIDENT (FIRST-AID)

First aid treatment for injuries may be obtained at the nearest medical facility and/or from a certified first-aider at sites without a medical facility. Report any incidents and near-miss incidents to both your supervisor and the Triovest Representative.

COMPUTER ROOMS

Contractor shall not touch any equipment, computers, telephones or the machinery while performing their work in computer rooms, unless specifically authorized to do so by an authorized Representative. Only in the case of an extreme emergency, where electrical power to all EPO (Emergency Power Off) controlled equipment (computer equipment, air conditioners, etc.) must be stopped, should a contractor hit the red EPO buttons located next to the main entrances/exits of a computer room.

ODOUR PRODUCING MATERIALS

No lead based paint is allowed. Only latex paint may be applied during normal business hours. All other products, such as stain, oil-based paint, lacquer, etc., or any odour-producing building materials such as carpet glues, sealants, welding equipment must be utilized or applied after normal business hours or after such time as it won't compromise tenant working conditions.

Contractors are encouraged to use only low off-gassing producing materials. However where odour-producing materials are used, the Contractor shall advise the Property Management office of dates when after-hours work will be taking place so arrangements can be made to have air-conditioning left on to disperse

odours. Charges for after-hours air-conditioning are to the Tenant's account. Listings of low off-gassing products are available on the following websites:

www.ecologo.org
www.greenguard.org

DUST CONTROL

The control and/or containment of airborne contaminants is crucial while working within the buildings. Any activity (drilling, sawing, moving existing equipment or services, etc.) that generates dust, dirt, etc. can contaminate and damage sensitive equipment in offices, laboratories, computer rooms, etc. Contractors are required to take all necessary steps to prevent the contamination of equipment and processes while performing their work.

The Tenant's contractor must sub-contract the Property Manager's approved HVAC Contractor to change filters on air-handling equipment at the commencement of construction and again, upon completion (where applicable). HVAC must also be turned off during demolition and construction to prevent air intake of excessive dust. When construction or demolition occurs on occupied multi-tenant floors, temporary hoarding or plastic sheeting must be installed to protect common areas and other tenants from exposure to dust.

SECURITY

Obey security procedures for entrance and exit to the building and any other specific security procedures required by Triovest or the customer. Entrance to an area other than where you are working is prohibited. Emergency exits should be used only in the event of an emergency. Doors locked from the outside (emergency exits) are not to be propped open without prior approval by management. Prior arrangements with the Triovest Representative must be made for any work to be performed during off-hours.

SMOKING

Smoking is prohibited in the building.

TELEPHONE CALLS

Please use telephones for business related calls only and not for personal calls. Do not use Triovest or customer phones unless prior authorization has been received. No long distance calls allowed.

The use of open flames is strictly forbidden in areas where flammable liquids, gases, or highly combustible materials are stored, handled, or processed.

TARPAULINS

When tarpaulins are required for the deflection of hot slag, dust, paint drippings, etc., or as security barriers, they shall be flame resistant and in good condition.

CUTTING, WELDING, BURNING OR SOLDERING

- 1) **Hot Work Permit system is to be used.**
- 2) Permission must be obtained from the Triovest Representative before any welding, cutting, burning or soldering equipment is used.
- 3) Non-combustible or flameproof shields or screens must be provided to protect employees from direct rays or arc.
- 4) Ensure that a fire watch is maintained and all adjacent combustible materials are protected or removed.
- 5) Adequate fire extinguishers must be maintained at the construction site and at the direct area where cutting, welding, burning or soldering taking place.

FIRE EXTINGUISHERS

Portable Fire Extinguishers are classified for handling specific types of fires.

CLASS "A"	Used for fires of ordinary combustible (i.e. wood, paper, etc.)
CLASS "B"	Used for flammable liquids and gas fires (gas, oil, paint, etc.)
CLASS "C"	Used for fire involving electrical equipment and wiring

MATERIAL HANDLING

- 1) Wherever practical heavy lifts should be done with Mechanical devices
- 2) When manual handling is required, dollies, pump trucks, 2 wheel carts and similar devices should be used.
- 3) Workers should know their physical limitations and approximate weight of materials they are trying to lift. Workers should be encouraged to get help when lifting task may be more than they can safely handle.
- 4) Piping, conduit, and other material over 3 metres (10 ft.) long must be carried by two men, each man supporting one end of the material to be transported.
- 5) When transporting piping, conduit and material under 3 metres (10 ft.) in length, the forward end of the material should be raised above head height to reduce the possibility of striking oncoming personnel.

- 6) The electrical system must be de-energized and temporarily grounded. All hydraulic and pneumatic systems must be de-pressurized and tested before work commences.
- 7) A record must be kept of all switches, power sources, controls, interlocks, pneumatics, hydraulics, computer-controlled sources, robotics, or other such devices opened, locked off or otherwise rendered inoperable so that all of these can be reactivated once work is complete.
- 8) Signs must be placed on the system indicating that it is not to be energized or operated and that guards, locks, temporary ground cables, chains, tags, and other safeguards are not to be tampered with or removed until work is complete.
- 9) Workers testing electrical systems must:
 - a) remove all watches, rings, neck chains or other current conducting jewelry.
 - b) Wear electric shock resistant footwear.
 - c) Wear safety glasses with side shields, preferably safety tinted.
- 10) After the assigned work is completed and the equipment is to be energized, remove your lock(s) and other lockout devices from the machinery/equipment.
- 11) Follow prescribed procedures for the proper start-up of a particular piece of equipment or machinery.
- 12) Look to make sure there are no hazards to personnel or workers. Restart the equipment.

ALWAYS REMEMBER!!!

- Only ONE lock on each energy source for each worker on the job.
- Never lend the key to your lock(s) to anyone.
- Protect others by barricading, roping off, posting signs, etc.
- When the power is on, never place yourself in a hazardous position in relation to a machine.
- Never stand in front of a disconnect when shutting off or on the energy source.
- Use “Extreme Caution” with possible stored energy sources usually found in forms of gravity, momentum and residual energy under tension.

OPEN FLAMES

VEHICLE PARKING AND SPEED LIMITS

All vehicles must be parked in authorized areas only. Parking in restricted areas or roadways is prohibited. Regular loading dock areas may be used for loading or unloading providing prior arrangements have been made by your employer with the Trio Vest Representative.

- Do not drive on lawns, sidewalks, or landscaped areas.
- Overnight parking is prohibited.
- Observe the speed limits and all other traffic regulations posted to ensure everyone’s safety.

SAFETY RULES AND STANDARDS

Every contractor must ensure that the safety rules and standards prescribed by the Occupational Health and Safety Act and Regulations and any other applicable legislation are strictly observed for any work performed on the premise. Moreover, Trio Vest requires that the contractor observe the following rules and standards.

ASBESTOS

Approval must be obtained from the Trio Vest Representative before initiating any work that involves asbestos. Notify the Trio Vest Representative immediately, if material-resembling asbestos is encountered. You shall utilize the safe work procedures as outlined in the Worksafe regulations applicable to your province for working with asbestos in all areas where asbestos may be encountered. All the requirements of Worksafe are applicable and mandatory where contact with any asbestos material is likely during renovations, maintenance or custodial work. In particular, it applies to all work where asbestos piping or boiler insulation is present. The Worksafe regulations shall be an enforceable requirement of all contracts and compliance with all applicable government legislation is mandatory. If in doubt of any procedure or work practices contact the Trio Vest Representative.

BREACH OF WALL OR FLOOR SLAB

Any penetrations that are made in any type of walls or floor slab must be restored as soon as possible to maintain a tight fire resistive seal around conduit, piping, ductwork, etc. The contractor that makes the breach is responsible for completing work and the Contractor’s Representative will ensure this work is completed.

COMBUSTION ENGINES – INDOORS

Gasoline, LP gas or other internal combustion engines must not be operated inside buildings unless approved oxy-catalyst exhaust purifiers are used or the exhaust is piped to an approved exhaust venting system or the exhaust is piped outside the building through a flexible or permanent exhaust hose. Permission from the Triovest Representative must be obtained before using such equipment.

COMPRESSED GAS CYLINDERS

1. Valve protection caps must be in place when compressed gas cylinders are transported, moved or stored.
2. Cylinder valves must be closed when work is finished and when cylinders are empty, are moved or are not in use.
3. Compressed gas cylinders must be secured (roped or chained) in an upright position at all times, except when cylinders are actually being hoisted or carried.
4. Cylinders must be kept at a safe distance or be shielded from welding or cutting operations. Cylinders must not be placed in contact with an electrical circuit
5. Oxygen and gas regulators must be in proper working order while in use. Hose lines must be periodically inspected and tested for leaks.
6. If a leak develops in a cylinder, immediately see to its removal to a safe location working area. If the leak cannot be corrected, the cylinder must be removed to a safe location outdoors.
7. Cylinders must be permanently marked or stenciled to identify the type of gas in the cylinder and properly identified with a contractor chemical label.
8. Regulators must also be labeled for a specific compressed gas and only be used with that particular gas cylinder. They must never be interchanged
9. Never trace gas leaks with matches, candles or open flames. In the event of a gas leak in piping systems, report the leak immediately, by calling the emergency number. Soapy water is excellent for detecting gas leaks.
10. Oil and oxygen under pressure react violently; therefore, never use grease or oil to lubricate the valve or joints of compressed gas cylinders. A drop of grease in an oxygen valve can cause an explosion.
11. Acetylene should not be used at more than 15 pounds gauge pressure

TAGGING AND LOCKING-OUT PROCEDURES

- 1) In-plant procedures specified Triovest or the customer take precedence over the procedures outlined here, providing there is no contravention of existing codes or statutes.
- 2) Review drawings of the system to be de-energized and de-activated to determine, and where required, confirm with Triovest or the customer, the switches, power sources, controls, interlocks, pneumatics, hydraulics, computer-controlled sources, robotics or other such devices necessary to isolate the system.
- 3) All apparatus capable of being electrically energized or pneumatically and hydraulically activated must be de-energized or de-activated by locking out, physically disconnecting or otherwise rendering by apparatus inoperable. Switches, power sources, controls, interlocks, pneumatics, hydraulics, computer-controlled sources, robotics or other such devices must be appropriately tagged and personally locked out by each person involved in the operation.
- 4) Test the system with a CSA-certified potential test indicator to ensure that all components are de-energized and de-activated, including interlocking or dependent systems, which could feed into the system being isolated, either mechanically or electrically. Potential test indicators should not be used beyond the voltage limits for which they are rated.
- 5) Observe the following safe guards for locking out and tagging:
 - a) After the circuit has been de-energized and locked out by the person in charge, you must be protected by personally placing your own safety lock on the disconnect device. The key for your lock must be retained on your person while your lock is in place. The locks provided shall not be mastered.
 - b) Where several workers or trades are working on the circuit, provision for additional locks must be made through the use of a lockout bar. This arrangement can accommodate any number of locks by placing another lockout bar in the last hole of the previous bar.
 - c) Each worker must attach to his or her lock a durable tag filled out with the pertinent information. The danger (red tag) tag will be used only to supplement the lock and identify the purpose of the locks. It will not be used as a substitute for a lock.
 - d) You must recognize that, even though the disconnect device may be already locked; you are not protected until you attach your personal safety lock.

- iii) The worker shall use approved rubber gloves, mats shields and other protective equipment and procedures adequate to ensure protection from electrical shock and burns while performing the work; and
- iv) A competent worker, who is able to recognize the hazards and perform rescue operations, including artificial respiration, shall be available and able to see the worker who is performing the work.

- 12. Acetylene cylinders must not be stored or used with the cylinder lying down. This can result in the release of liquid acetone. If acetone release occurs, shut off the cylinder, remove it, and tag it 'unsafe'.
- 13. Hydrogen cylinder valves must be cracked open to blow out possible dirt accumulations, hydrogen gas can self-ignite. Compressed gas cylinders must not be dropped, bumped or exposed to excessive temperatures.

CONFINED SPACE ENTRY

Confined spaces include storage tanks, bins, sewers, in ground vaults, degreasers, boilers, vessels, tunnels, manholes, pits, trenches (more than 4 feet deep), etc. These enclosures, because of inadequate ventilation and/or the introduction of hazardous gases and vapors, may present conditions that could produce asphyxiation, injury or death. Before entering a "Confined Space", your employer must notify the Triovest Representative of your intention. You must read and abide by the rules and regulations of entering a confined space which include:

Removal of Contents

Confined space must be clean, free of hazardous materials/chemicals, and where necessary, purged by water or other equivalent means.

Isolation

All input lines that discharge into the confined space shall be disconnected and capped or isolated. The use of a single in-line valve shutoff as the sole means of isolating the confined space from any input line is prohibited. However, the use of a double in-line valving arrangement with a vent in between the two valves is acceptable provided that dangerous air contaminants are not introduced by such venting. All valves used for isolation shall be properly tagged. The person performing the job and only this person is authorized to remove the tag upon completion of the job.

Electrical Lockout

When electrical devices located within the confined space (motors, switches, etc.) are to be repaired or worked on, the line disconnect switches supplying the power must be tagged and locked in the "Off" position. The lock key is to be kept by the person performing the job, and only this person is authorized to unlock the switch and remove the tag upon completion of the job. Where more than one person is working on the line, each must place a lock on the switch and retain his own key. Line disconnect switches supplying power to any mechanical apparatus in the confined space (mixers, conveyors, etc.) must also

be tagged and locked in the “Off” position. This must be done for any entry even though work may not be performed on the apparatus itself.

lights must not be suspended by the electric cords unless designed for this use.

- 4) Receptacles for attachment plugs must be of the CSA approved, concealed contact type. Where different voltages, frequencies, or types of current are supplied, receptacles must be of such design that attachment plugs are not interchangeable.
- 5) Do not operate any “in service” switches, breakers, etc., without prior approval from the Trio Vest Representative. Switching orders and tagging are required before any work can begin. The Trio Vest Representative will advise your supervisor as to switching order procedure.
- 6) Electrical systems must be locked out before working on them. The responsibility for locking out electrical circuits rests with the contractor working on the circuit. Always check with a Trio Vest Representative before locking out power to the system. Circuits must be checked with a voltage tester, meter, or other suitable equipment before starting to work.
- 7) **Red Tag Permit must be used.**
- 8) All voltages should be considered dangerous, even though the voltage may not be great enough to produce serious shock. Contact with low voltages may cause a reflex reaction, which could result in serious injury.
- 9) Cables and power supply cords must not be run across aisle ways and corridors where they create a tripping hazard. They must be hung overhead to reduce the possibility of traffic cutting or fraying the cord.
- 10) Exposed voltages in an occupied area must not be left unattended by the contractor.

WORKING ON LIVE ELECTRICAL

No worker shall work on or around live exposed parts of the equipment or conductors unless:

- a) the equipment/wire is undergoing testing/troubleshooting operations, or
- b) if it is not practicable to disconnect electrical equipment or conductors from the power supply.

If work must be done under subsection (b) noted above, the following rules must be adhered to:

- i) the immediate supervisor must be notified.
- ii) **Only trained, licensed mechanics will perform the work (at no time will an apprentice perform these tasks).**

- Never straddle between a ladder and another object or sit on the ladder.
- When working on a ladder and in danger of falling 3 metres (10 ft.) or more, a safety belt must be worn.
- Stepladders must be fully spread and the spreader bar locked in place.
- Never stand higher than the second step from the top on any ladder.

Scaffolds

Some basic rules for scaffolds are:

- Have all uprights braced diagonally in the vertical and horizontal planes.
- Have sound and correct bases and/or wheels
- Use all safety catches.
- When scaffolds exceed three times the least lateral dimension measured at the base, the scaffold must either be:
 - Be tied to a structure
 - Use guy wires or
 - Add outriggers
 - When scaffolds are erected 2.4 metres (8 ft.) or more, they must be:
 - Fully planked
 - Have a guardrail added (guard rail must be between 0.9 and 1.1 metres [36" to 42" high])
 - Add a proper access ladder
- Scaffold planks must be a full 2" or 10" rough-cut or approved for that purpose.
- Scaffold planks must overhang their supports 150 to 300 millimeters (6" – 12") and must be secured against slipping.
- When a worker is on a rolling scaffold 2.4 metres (8 ft.) or more and the scaffold must be moved the worker must either get off or wear full body harness attached to a fixed building support.
- Any scaffold built 15 metres (50 ft.) or higher must have engineered drawings on site.
- Minimum width of a scaffold is 460 millimeters (18")

ELECTRICAL SAFETY

- 1) The noncurrent-carrying metal parts of fixed, portable, or plug-connected equipment must be grounded. Portable tools and appliances protected by a CSA approved system of double insulation need not be grounded.
- 2) Extension cords must be the 3-wire type and must be protected from damage, i.e., do not fasten with staples or extend across an aisle or walkway. Worn, frayed or damaged cords/plugs must not be used.
- 3) Exposed bulbs on temporary lights must be guarded to prevent accidental contact, except where bulbs are deeply recessed in the reflector. Temporary

Security of Covers

All manhole and cleanout covers shall be removed and the openings maintained clear of any obstruction. Floor openings are to be properly marked and barricaded. When hinged doors or lids are provided, they shall be secured so that they cannot be accidentally closed.

Testing Atmosphere

A trained and competent person shall make appropriate tests of the atmosphere in the confined space to assure that no hazard exists or is likely to develop in the confined space and that the oxygen content in the atmosphere is greater than 20 percent.

Continuous Monitoring

If the nature of the work to be performed introduces or has the potential to introduce harmful air contaminants, continuous monitoring of the atmosphere is required. If tests indicate evidence of dangerous air contaminants, and/or the oxygen content drops below 20 percent, all personnel must evacuate the confined space immediately.

Ventilation

All confined spaces, unless the requirement is specifically waived by an authorized Representative, must be ventilated by the use of positive mechanical exhaust system arranged so as to avoid recirculation-contaminated air. Your employer must contact a Triovest Representative to obtain approval not to ventilate.

Buddy System

At least one standby fellow employee shall be stationed just outside the access opening of any confined space while such space is occupied. This person must:

- a) maintain continuous awareness of the activities and well-being of the occupant of the confined space
- b) be able to maintain verbal communication at all times.
- c) Be alert and fully capable of quickly summoning help.
- d) Be physical able and equipped to assist in the rescue of an occupant from a confined space under emergency conditions. Do not enter confined space until properly equipped with self-contained breathing apparatus.

Safety Gear and Personal Protective Equipment

You must be instructed by your employer regarding safety gear and personal protective equipment required including protective clothing, hard hats,

respirators, life lines and harnesses. Be sure such instructions are received before entering any confined space.

INDUSTRIAL HYGIENE

Contractors are responsible for the health and safety of their own employees. Contractors shall abide by the applicable regulations of the various Provincial Health and Safety Acts.

PERSONAL PROTECTIVE EQUIPMENT

Head Protection

All workers will wear a Class “B” C.S.A. certified hardhat in designated construction zones. Hard hats must not be cracked, painted or have any holes in the shell. It is required that the hard hat not be over 5 years old.

Foot Protection

All workers will wear in construction zones a pair of green triangular patch, Grade 1 C.S.A. approved footwear. If the boot has laces, it is required that the laces be tied.

Eye Protection

All workers must wear an appropriate type of protective eyewear for any hazard they may encounter

Clothing

Cotton or wool fabrics are more flame retardant and therefore, recommended as work clothes for trades persons. Loose, ragged or torn clothing is usually a hazard and should not be worn. Triovest requires all workers to wear long pants and shirts with sleeves intact (full T-shirts).

Fall Protection (Belt or Harness)

Fall Protection must be worn by a worker who may fall:

- a) a distance of 3 metres (10 ft.) or more
- b) into operating machinery
- c) into water or other liquid or
- d) into or onto a hazardous substance or object

A fall arrest system, which is attached securely, shall be so arranged that if a worker falls, the person will be suspended not more than 1.5 metres (5 ft.) below

their location before the fall. If the worker is wearing a fall protection belt, it is imperative that the “D” Ring is on the middle of the back and worn snugly. The “D” Ring on a harness shall be situated between the shoulder blades and all straps should be tightened snugly. A worker situated on a rolling frame scaffold that is moving and is 2.4 metres (8ft.) or more shall wear a harness attached to a fixed support. A worker on a power elevated work platform shall wear at least a safety belt attached to the platform for their protection.

Hearing

Workers, who work in an area where they could be subject to loud noises that damage hearing, must wear adequate protection. Personal Sound Transmission Devices (i.e. Walkmans, Radios, MP3 players) are prohibited by all personnel on work site.

Alcohol and Drugs

- No person under the influence of, or carrying, intoxicating alcoholic beverages is to enter or knowingly be permitted to remain at a work site.
- No person under the influence of, or carrying an illicit drug is to enter or knowingly be permitted to remain at a work site.
- The use of drugs during working hours, including rest or lunch breaks, is prohibited without written clearance from a physician that the drug will not impair the person’s ability to work safely.

OVERHEAD WORK

No overhead work will be performed when, as a result of that work, the possibility of a falling object striking any person exists. Do not work over any person at any time.

Ladders

Some basic rules for ladders are:

- Always ensure you have the right ladder for the task on hand.
- Always face ladder when ascending or descending
- Never tie or lash ladders together
- Set ladders up on a 1:4 to 1:3 ratio (horizontal: vertical height)(e.g. for a 12’ high wall, base of ladder should be 3’ to 4’ away from wall at base of wall).
- Ladders must extend a minimum of 90 cm. (3ft.) above the landing; minimum overlap is 90 cm. (3 ft.).
- Aluminum ladders should not be used in close proximity to energized electrical conductors/apparatus.
- Damaged ladders to be tagged and returned to the shop for repair or destruction.